

Formosa Plastics Corporation, Texas

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: 361-987-7000

January 8, 2012

Via e-mail and Certified Mail: 7011 0110 0000 1782 9800

Ms. Nancy Fagan
Project Coordinator
6PD-O
U. S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

RE: Supplemental AOC Work Plan

RCRA Docket No. VI-001(h)-90-H

3008(h) Administrative Order on Consent

EPA I. D. No. TXT490011293

Solid Waste Registration No. 31945

Dear Ms. Fagan:

Please find attached for your review and comment the Supplemental Areas of Concern (AOC) Work Plan. This document is being submitted as required by Amendment No. 2 to the 3008(h) Order, TASK XI: Corrective Measures Implementation Program.

If you have any questions about this report, please contact Matt Brogger at (361) 987-7468 or by e-mail at mattb@ftpc.fpcusa.com.

Sincerely

R. P. Smith

Vice President/General Manager Formosa Plastics Corporation, Texas

Attachment





cc: Ms. I

Ms. Maureen Hatfield, (MC-127)

Certified Mail: 7011 0110 0000 1782 9817

TCEQ

P.O. Box 13087

Austin, TX 78711-3087



Formosa Plastics Corporation, America

201 Formosa Drive • P.O. Box 700 Point Comfort, TX 77978 Telephone: (361) 987-7000

Fax: (361) 987-2363

January 25, 2012

Certified Mail: 7008 1830 0000 9417 2332

Ms. Nancy Fagan
Project Manager
6PD-O
U. S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

RE: RCRA Docket No. VI-001-(h)-90-H

3008 (h) Administrative Order on Consent 4th Quarter Interim Measures Ground Water Monitoring Report and GWQAP, 2011

Dear Ms. Fagan:

Please find enclosed your copy of the 4th Quarter 2011 Interim Measures Ground Water Monitoring Report and Ground Water Quality Assessment Plan Annual Report prepared by Tetra Tech. The Annual Ground Water Quality Assessment Plan Report has been combined with the Quarterly Interim Measures Report to conform to EPA's paper work reduction act and the TCEQ's waste minimization goals.

Should you have any questions, please contact Matt Brogger at (361) 987-7468 or by email at mattb@ftpc.fpcusa.com.

Sincerely,

R. P. Smith

Vice-President / General Manager Formosa Plastics Corporation, Texas

Enclosure





Ms. Nancy Fagan U. S. EPA January 25, 2012

cc: Ms. Merrilee Hupp, (MC-169)
TCEQ Enforcement Branch
Industrial Hazardous Waste Division
P. O. Box 13087

Austin, Texas 78711-3087

Ms. Susan Clewis TCEQ Region 14 NRC Building, Suite 1200 6300 Ocean Drive, Unit 5839 Corpus Christi, Texas 78412-5839 Certified Mail: 7008 1830 0000 9417 2349

Certified Mail: 7008 1830 0000 9417 2356



INTERIM MEASURES
GROUNDWATER MONITORING REPORT
AND
GWQAP ANNUAL REPORT
FOURTH QUARTER 2011
GWQAP 16TH YEAR

FORMOSA PLASTICS CORPORATION POINT COMFORT, TEXAS

FOURTH QUARTER 2011

January 20, 2012

complex world

CLEAR SOLUTIONS™

INTERIM MEASURES GROUNDWATER MONITORING REPORT AND GWQAP ANNUAL REPORT

FOURTH QUARTER 2011 GWQAP 16TH YEAR

Prepared for:

Formosa Plastics Corporation

Point Comfort, Texas

Prepared by:

Tetra Tech

7800 Shoal Creek Blvd., Suite 253E Austin, TX 78757 (512) 338-1667 Fax (512) 338-1331

Tetra Tech Project No. 114-021356

January 20, 2012

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1.0 INTRODUCTION

1.1 Background

Formosa Plastics Corporation, Texas (FPC-TX) owns and operates a chemical manufacturing facility in Point Comfort, Texas. This facility is located in Calhoun County along State Highway 35 and Farm to Market Road (FM) 1593, adjacent to Lavaca Bay (Figure 1). FPC-TX manufactures vinyl chloride monomer (VCM) and ethylene dichloride (EDC) at the facility, which are used to produce polyvinyl chloride (PVC) resin.

In accordance with the U.S. Environmental Protection Agency (EPA) Administrative Order on Consent with Corrective Action Plan (CAP) dated February 27, 1991 (EPA I.D. No. TXT490011293), FPC-TX has undertaken measures to characterize and remediate soil and groundwater affected by volatile organic compounds (VOCs) at the Point Comfort facility.

FPC-TX initiated an expedited interim groundwater recovery and remediation program at the Point Comfort facility while awaiting completion and approval of the RCRA Facility Investigation (RFI) and final corrective action plan. This interim groundwater recovery and remediation program was implemented in accordance with the approved Expedited Interim Measures Groundwater Remediation Plan (IMP) dated January 23, 1992. The IMP required quarterly sampling and reporting activities on the progress and effectiveness of the interim measures.

In October 2001, FPC-TX proposed modifications to the groundwater-monitoring program (MFG, 2001). The EPA reviewed the proposed modifications and responded with comments on November 15, 2001. An agreement on the proposed modifications was reached via conference call between FPC-TX and EPA on March 5, 2002. MFG, Inc. (MFG) prepared a new Groundwater Sampling and Analyses Plan (GWSAP) based on the approved modifications to the IMP. Changes to the existing program included:

- A modified analytical program eliminating analyses for total organic carbon (TOC) and semivolatile organic compounds (SVOCs) and reducing the number of metals analyses;
- A modified conceptual model of the facility including five water bearing zones as opposed to the two units described in previous documents;
- A change from WaTerra sampling to low-flow sampling techniques;
- A reduced sampling frequency from quarterly to semi-annually with the exception of wells located along the down-gradient edge of the plume near the property boundary; and
- A modified and condensed quarterly report.

FPC-TX implemented the modified program in 2002. Based on the groundwater monitoring program completed in 2002, FPC-TX proposed additional modifications to the program. These changes consisted of the following:

- Metals analyses were eliminated as part of the interim measures monitoring program;
- · All groundwater monitoring wells will be sampled in the first quarter of each year; and
- Monitoring wells located near the down-gradient property boundary, near the perimeter
 of the known plume, and located at locations critical to monitor potential vertical
 migration of impacted groundwater will be sampled every quarter.

The EPA verbally approved these additional modifications via conference call on December 31, 2002. FPC-TX implemented the additional modifications to the program in 2003. FPC-TX received formal written acceptance via letter dated January 8, 2007.

2.0 FIELD ACTIVITIES

Tetra Tech performed the sampling activities during the current quarter. All fourth quarter 2011 field activities were performed in accordance with the revised GWSAP (MFG, 2006) unless otherwise noted.

2.1 Groundwater Level Measurement

Groundwater elevations were measured on November 28 and 29, 2011. The locations of all wells are shown on Figure 2. Water level data are summarized in Table 1 and the water level monitoring field records are included in Appendix A. Groundwater level measurements were performed in accordance with the GWSAP with the following exceptions:

- Groundwater elevations were not measured at monitoring wells P-17 and P-23. The
 water level measuring device was unable to be lowered into P-17 because of well
 casing damage. The lock on P-23 was unable to be removed due to excessive
 corrosion;
- The groundwater elevations in recovery wells RS-1, RS-3, RS-6 and RD-1 were not measured. Measurements could not be obtained because there is no access to the well given the current pump configuration and/or because of lockout-tagout restrictions.

2.2 Well Purging and Sample Collection

The monitoring wells and recovery wells were purged and sampled on November 28 and 29, 2011. The groundwater sampling field records are included in Appendix B. Tetra Tech measured the following field parameters prior to sampling: pH, specific conductivity, temperature and turbidity. These field data are presented in Table 3. Field equipment was calibrated daily at the beginning of the day. Calibration information was recorded on the meter calibration logs, included in Appendix C. In addition, daily field records and safety forms were completed and are included in Appendix D. Well purging and sample collection were performed in accordance with the GWSAP with the following exceptions:

 A groundwater sample was not collected at recovery well RS-6 due to lockout-tagout notification posted on the well.

3.0 SITE HYDROGEOLOGY

The groundwater level measurement data (Table 1) collected on November 28 and 29, 2011 was used to develop potentiometric surface contour maps for Zone P, Zone A, Zone B, and Zone C (Figures 3 through 6).

4.0 GROUNDWATER ANALYTICAL RESULTS

The monitoring well groundwater samples, recovery well samples, field blanks, trip blanks, and duplicate quality assurance/quality control (QA/QC) samples were analyzed by the FPC-TX on-site laboratory for the VOCs listed in Appendix E. Chain-of-custody forms are included in Appendix F. The complete FPC-TX laboratory data report from the quarterly sampling event is included in Appendix G.

Sampling for fourth quarter 2011 groundwater monitoring event was conducted by Tetra Tech on November 28 and 29, 2011. During this period, the FPC-TX on-site laboratory received 33 groundwater monitoring well samples, three field duplicate samples sets, three trip blanks, and three field blanks. In addition, three field duplicate samples and one trip blank were sent to an off-site laboratory, Test America Laboratory, Inc. (TAL). The complete TAL laboratory data report from the quarterly sampling event is included in Appendix H.

4.1 Volatile Organic Compounds Analytical Results

Thirty-three monitoring wells located in the pre-1990 facility area were sampled during the fourth quarter 2011 monitoring event. VOCs were detected in samples from 21 of the 33 wells sampled during this quarter. The primary compound detected (detected at the highest concentrations) was EDC. Table 4 presents the VOC analytical results that were reported above the detection limit for all sampled wells. A complete list of VOCs analyzed is included as Appendix E.

The estimated area of EDC concentrations greater than 5 μ g/I (the typical detection limit) for Zones P, A, B, and C, are presented on Figures 3, 4, 5, and 6, respectively. Graphs presenting the historical concentrations in wells with concentrations of VOCs above the detection limit are provided in Appendix I.

4.2 Data Validation

Table 5 presents VOC analytical results for field duplicates analyzed in-house (FPC-TX laboratory) and at the off-site laboratory (TAL). VOC analytical results for trip blanks and field blanks are presented in Table 6. A QA/QC data validation review was performed to evaluate the level of accuracy, precision, and completeness of the laboratory data.

The Groundwater Sampling Protocol does not specify acceptance criteria for field duplicates; however, 30 percent relative percent difference (RPD) is the standard acceptance criteria for

aqueous samples. The field duplicate RPDs from FPC-TX laboratory samples collected at D-33 and P-9 were less than the standard 30 percent RPD for all detectable analytes. Duplicate sample results for P-55 were all non-detect; therefore the RPD could not be calculated.

Precision was evaluated based on the agreement between the matrix spike and matrix spike duplicate (MS/MSD) since there are no project control limits established for field duplicate samples. The FPC-TX MS/MSD RPDs were all within the laboratory control limits for each analyte. All of the FPC-TX MS/MSD percent recoveries were within laboratory control limits, except for toluene which slightly exceeded (112-113 percent) the laboratory limit of 91 to 109 percent. MS/MSD data were not reported in the TAL data package. All the TAL laboratory control sample (LCS) recoveries met laboratory criteria. LSC recoveries were not reported in the FPC-TX data package.

Surrogate recoveries for both FPC-TX and TAL data packages were within the laboratory control limits.

Methylene chloride was detected in the method blanks from the TAL analysis. Methylene chloride was not detected in any of the field samples or the trip blank; therefore no data qualification is necessary.

Tetra Tech contacted the QC Supervisor at the FPC-TX laboratory (Mike Rodriquez) on January 17, 2012 and requested that they review laboratory records for possible sample logging or analysis errors for the December 1, 2011 analytical batch. The FPC-TX laboratory reviewed the data and sample log files and determined that a lab error occurred in the sequence log which caused some of the samples in this batch to run through the auto sampler machine out of sequence. This lab error affected the original analytical results reported on January 9, 2012 for the following samples: P-10, P-15, P-55, and P-56. The lab injection log files and analytical results were corrected and rereported on January 19, 2012. Appendix G is the corrected revised analytical report.

All data was determined to be valid and usable for the purposes intended by this report. Detailed data evaluation checklists for the data sets from both the FPC-TX laboratory and TAL are provided in Appendix J.

4.3 Potential for Dense-Non-Aqueous Phase Liquid (DNAPL)

Past studies indicate that dissolved concentrations of chlorinated hydrocarbons greater than one percent (1%) of the aqueous solubility limit for the compound are indicative of the potential for free-

phase, or DNAPL, presence (Cohen and Mercer, 1993). The aqueous solubility limit of EDC is 8,700~mg/L. One percent of 8,700~mg/L is 87~mg/L (or 87,000~µg/l). Analytical results were compared to this threshold to evaluate the potential for DNAPL.

EDC concentrations exceeding 87,000 μ g/l (1% EDC solubility limit) were found in samples from the following wells in or near the VCM Process Area during the fourth quarter sampling event.

- D-41 (261,120 μg/l); and
- RS-1 (187,460 μg/l).

EDC concentrations exceeding 87,000 μ g/l (1% EDC solubility limit) were found in samples from the following wells in or near the Waste Water Treatment Area during the fourth quarter sampling event:

- P-56 (1,722,200 μg/l); and
- P-57 (851,300 μg/l).

Based on the fourth quarter 2011 results, the potential for DNAPL exists at the site in Zone A in the Waste Water Treatment Area and Zones A and C in the VCM area. DNAPL has never been visually observed in monitoring wells or groundwater samples from the site.

DNAPL measurements are performed each quarter at wells where the EDC concentration exceeded 1% of the solubility limit in the previous sampling event. During the fourth quarter, DNAPL measurements were performed at wells that historically had high EDC concentrations. DNAPL measurements are reported in Table 2.

During two previous sampling events within the last year, Tetra Tech observed initial positive readings of DNAPL in P-12. After further field investigation, it was determined these initial readings were false positive readings potentially associated with the breakdown of the well casing. There was no product detected in P-12 during the fourth quarter 2011 event.

4.4 Statistical Analysis

In accordance with the IMP reporting requirements, a statistical analysis of analytical data was performed. The parameter chosen for statistical analysis was EDC, since EDC is the most

frequently detected constituent and is found at the highest concentrations. In addition, EDC does not occur naturally in the environment, which makes it a good indicator of impacted groundwater. Background data were initially collected from Upper and Lower Aquifer wells for use in the statistical analysis as a baseline. A minimum of either four consecutive quarters or one year of sample results was used to establish background conditions for each well. Each successive quarter's sample results for a particular well were then compared statistically to the established EDC background value for that well to determine if a significant increase in EDC concentration occurred in each quarter.

The statistical analysis was completed in accordance with the Student's t-test at the 99 percent confidence interval (0.01 level of significance). The purpose of the statistical analysis is only to detect whether the area and concentration of EDC-impacted groundwater is increasing with time. If the IMP is successful, the area and concentration of EDC-impacted groundwater should be decreasing. A negative statistical result indicates the current sample has values for EDC that are less than that of the background mean and therefore, are not significant for the purposes of the IMP. The calculated t-values resulting from the statistical analysis were compared to published calculated t-values for a given number of degrees of freedom in a single-tailed test at the 99 percent confidence interval.

Where the calculated t-value for the fourth quarter 2011 results was less than the published value, the result has been presented as "PASS" (Table 7). Where the calculated value was greater than the published t-value, the result was presented as "FAIL". A failure indicates that the fourth quarter 2011 EDC concentration measured in the monitoring well was a statistically significant increase over the background EDC value for that monitoring well. If the analytical results for the current sample were below the reporting limit, a value of one-half of the reporting limit was used in the statistical analysis.

In some cases, a statistical evaluation cannot be performed using the background values. This occurs when all of the background sample results are below the method detection limit. When this occurs, using one-half of the detection limit for calculation purposes yields no variance and a standard deviation of zero. If the quarterly sample results were also non-detect, then it was reasoned that no significant increase in EDC concentration occurred and the statistical analysis was presented as "PASS". In the case where the quarterly sample results were above the reporting limit, then it was reasoned that an increase in EDC concentration had occurred. However, because the standard deviation for the background data was zero, a t-value cannot be calculated. In this

case, the statistical result was presented as "POSSIBLE FAIL". This is because while an increase in EDC concentration was noted to occur, the statistical analysis cannot yield results, which indicate whether or not the increase was significant, as compared to previous background concentrations.

Statistical comparisons were completed for 26 monitoring wells that were sampled and analyzed for EDC during the fourth quarter 2011. The results are presented in Table 7. The statistical evaluations indicated that three samples (P-3, P-56, and D-2) failed the evaluation and samples from four locations are considered "POSSIBLE FAILS" (D-14, D-33, D-34, and D-41). These wells are all in areas of existing plumes. The evaluation indicates that the area of impacted groundwater has increased relative to the initial background period.

5.0 GROUNDWATER REMEDIATION SYSTEM

5.1 Fourth Quarter 2011 Summary

The interim measures groundwater recovery and remediation system at FPC-TX consists of six recovery wells (RS-1, RS-2, RS-3, RS-4, RS-5, and RS-6) in Zone A, two recovery wells in Zone B (RS-1 and RD-3), and one recovery well located in Zone C Upper (RD-1). Based on well construction logs, recovery well RS-1 appears to be screened across both Zone A and Zone B. The well construction log for RS-3 has not been located; it is assumed that this well is screened in Zone A. The recovery wells are equipped with pneumatic or electric pumps that pump groundwater to a dedicated steam stripper. Recovered groundwater processed through the steam stripper is discharged through the plant permitted wastewater Outfall 001. A total of approximately 484,000 gallons of groundwater were removed during the fourth quarter 2011 (Appendix L).

5.2 Interim Measures Remediation System Effectiveness

The fourth quarter 2011 monitoring event included sampling wells that are located at the down-gradient property boundary or between the leading edge of the EDC plume and the down-gradient property boundary, and monitoring wells that are useful in monitoring potential vertical movement of the VOC plume. Based on an evaluation of the data, the existing interim measures groundwater recovery and remediation system does not appear to be adequately controlling the horizontal or vertical migration of the EDC plume; however, there are no indications that impacted groundwater has migrated off-site. FPC-TX is currently evaluating the steps necessary to implement a more effective interim measures groundwater recovery system.

5.2.1 Waste Water Treatment Area

Currently, there are two Zone A recovery wells operating in the Waste Water Treatment Area, RS-2 and RS-6; however, these two wells were not in operation during the fourth quarter sampling event Zone A monitoring wells P-15, P-18, P-56 and P-57 located at the down-gradient edge of the monitored area each had detectable concentrations of VOCs in the fourth quarter 2011. The monitoring well with the highest EDC concentration was P-56 (1,722,200 μ g/l). Although groundwater in the vicinity of monitoring wells P-56 and P-57 may be controlled by recovery well RS-6, monitoring wells P-15 and P-18 are likely located beyond the capture zone created by RS-2 and RS-6.

There are no recovery wells operating in the deeper water bearing zones in the Waste Water Treatment Area. Groundwater samples from two monitoring wells in Zone B (D-32, and D-33) and

two monitoring wells in Zone C (D-16 and D-34) contained VOC concentrations in excess of the detection limit during the fourth quarter sampling event.

5.2.2 VCM Area

The current recovery system in the VCM area includes recovery wells in Zone A, Zone B, and Zone C. There are no recovery wells located in Zone P. Based on a review of the fourth quarter 2011 potentiometric and analytical data, the following conclusions can be reached:

Zone P – Zone P monitoring wells were not sampled during the fourth quarter 2011 sampling event.

Zone A – Recovery wells RS-4 and RS-5, located near the down-gradient property boundary, represent the down-gradient control of the Zone A EDC plume. FPC-TX completed a Zone A groundwater investigation of the property south of State Highway 35 in 2007 and no VOCs were detected in Zone A. EDC concentrations in recovery wells RS-4 and RS-5 have decreased since they were last sampled in the third quarter 2011; from 21.41 μ g/L to 11.95 μ g/l, and 2,710 μ g/l to 10.75 μ g/l, respectively. In addition, other VOCs were detected in RS-4 and RS-5 during the fourth quarter event.

The EDC concentration in P-3 during the fourth quarter event was considerably lower (27,792 μ g/l) than the concentration detected during the third quarter (72,750 μ g/l). Chloroform was also detected (1,740 μ g/l) in P-3 during the fourth quarter event.

An EDC concentration of 5.54 μ g/L was detected in P-10 during the first quarter 2011 sampling event, a well that has historically not had any VOC detections. The EDC concentration of was less than the reporting limit of 5 μ g/L during the second, third and fourth quarter 2011 sampling events.

Zone B — The down-gradient extent of the EDC plume in Zone B does not appear to be adequately defined between recovery well RS-1 and the property boundary, thus it is not possible to determine if recovery well RS-1 is adequate to control horizontal migration of the plume in this zone.

Zone C – VOC concentrations at D-41 may potentially indicate horizontal migration beyond the control of RD-1 or vertical migration from the upper water-bearing units. The fourth quarter EDC concentration in D-41 was 261,120 μ g/L. Historically, D-39 has not had any VOC detections, but the well was added to the quarterly monitoring schedule after VOC concentrations were detected in the well during the first quarter 2011 sampling event. During the fourth quarter 2011

sampling event, EDC was detected in D-39 at a concentration of 263.9 μ g/L, which is slightly higher than the EDC concentrations detected during the third quarter sampling event. The EDC concentration in monitoring well D-12 (3,346.8 μ g/L) may indicate that the existing groundwater recovery system in the shallower zones may not be adequate to control the vertical migration of the EDC plume into the lower water-bearing zones at the site.

6.0 GROUNDWATER QUALITY ASSESSMENT RESULTS

6.1 GWQAP Objectives

The Groundwater Quality Assessment Plan (GWQAP) (Environeering, 1994) was developed to evaluate groundwater contamination in the Wastewater Treatment Area, specifically at the Storm Water Basin and Equalization/Aeration Basins (considered as one basin for the purposes of the GWQAP due to their proximity). The assessment program consists of quarterly sampling and analysis of groundwater from a series of wells for identified constituents of concern. The program consists of the following components:

- · Confirmation of an impact to groundwater;
- Quantification of an impact to groundwater; and
- Evaluation of the contaminant source.

The wells used for the assessment are:

- Wells P-22, P-34, and P-45 as background wells for the Upper Aquifer;
- Wells D-1 and D-23 as background wells for the Lower Aquifer;
- Well P-19, P-20, P-33, P-47, and P-67 as Upper Aquifer downgradient wells for the Equalization/Aeration Basins;
- Wells D-32, D-33, and D-34 as Lower Aquifer downgradient wells for the Equalization/Aeration Basins;
- Wells P-12, P-31, and P-48 as Upper Aquifer downgradient wells for the Storm Water Basin; and
- Wells D-2, D-15, and D-22 as Lower Aquifer downgradient wells for the Storm Water Basin.

The constituents of concern are:

- EDC (1,2-dichloroethane for 1,2-DCA);
- 1,1-dichloroethane (1,1-DCA);
- 1,1-dichloroethene (1,1-DCE);
- Chloroform;
- Benzene; and
- Vinyl chloride.

The following sections satisfy the reporting requirements for the GWQAP assessment.

6.2 Confirmation of Impact to Groundwater

The purpose of this component of the GWQAP is to confirm an impact to groundwater in the Waste Water Treatment Area. This evaluation is conducted through a statistical analysis of sample data for the constituents of concern from the background (upgradient) and downgradient wells in the Waste Water Treatment Area. The statistical method used for this evaluation is described in the GWQAP. The method is the same as that used for the IMP quarterly data as described in Section 4.4, except that the background statistic is calculated on a three-year moving window of data from the upgradient, background wells. The background statistics are in Table 8.

6.2.1 Equalization/Aeration Basins

The statistical analysis conducted for the 2011 quarterly data indicates that the following wells are impacted by the Equalization/Aeration Basins as shown in Table 9 (Upper Aquifer) and Table 10 (Lower Aquifer).

Well	Aquifer	Constituent(s)			
P-19	Upper	1,1-DCA, vinyl chloride			
P-20	Upper	1,1-DCA, vinyl chloride			
P-47	-47 Upper 1,1-DCA				
P-67	Upper	EDC			
D-32	Lower	EDC, 1,1-DCA, 1,1-DCE, chloroform, vinyl chloride			
D-33	Lower	EDC, 1,1-DCA, 1,1-DCE, vinyl chloride			
D-34	Lower	EDC, 1-1-DCA			

Concentrations of the constituents of concern detected in samples from the downgradient wells are listed in Tables 9 and 10, as well as in Table 4.

6.2.2 Storm Water Basin

The statistical analysis conducted for the 2011 quarterly data indicates that the following wells are impacted from the Storm Water Basin as shown in Table 11 (Upper Aquifer) and Table 12 (Lower Aquifer).

Well	Aquifer	Constituent(s)
P-12	Upper	EDC, benzene, 1,1-DCA, chloroform, vinyl chloride
P-31	Upper	EDC, benzene
D-2	Lower	1,1-DCA, benzene, chloroform, vinyl chloride
D-15	Lower	1,1-DCA, chloroform, vinyl chloride

Concentrations of the constituents of concern detected in samples from the downgradient wells are listed in Tables 11 and 12 as well as in Table 4.

6.3 Evaluation of Contaminant Sources

As described in previous reports, based on the GWQAP statistical evaluation described above, the sources of contaminants to downgradient wells are the Equalization/Aeration Basins in the Waste Water Treatment Area and the Storm Water Basin in the VCM Area; however, the GWQAP was originally developed in 1993 and was predicated on a two-aquifer hydrogeologic model, thus the existing GWQAP does not accurately evaluate the impacts to groundwater. The latest information and conceptual site model presented in the Current Conditions Technical Memorandum (Tetra Tech, 2008) indicates that the likely primary sources to groundwater were Solid Waste Management Units (SWMUs) 21/22/23 in the VCM Area and the Surge Basin/Emergency Basin in the Waste Water Treatment Area. These units were taken out of service. Groundwater recovery operations have taken place in both the Waste Water Treatment Area and VCM Area since May 1993.

7.0 RECOMMENDATIONS

7.1 Interim Measures Remediation System

FPC-TX is currently evaluating possible improvements to the groundwater recovery system. One specific area is recommended for immediate attention:

1) Enhancement of the existing recovery wells to provide more consistent operations.

7.2 Recommended First Quarter 2012 Sampling

The objective of the Interim Measures groundwater control system at the facility is to mitigate the migration and growth of the known plume of impacted groundwater during completion of the RFI/CMS and selection and implementation of a final selected corrective measure. The purpose of the groundwater-monitoring program at the site is to measure the effectiveness of the Interim Measures groundwater control system. Given the stated groundwater monitoring program objective, Tetra Tech identified the following criteria to select wells appropriate for monitoring the effectiveness of the Interim Measures groundwater control system:

- 1) The monitoring well is at the down-gradient property boundary, or between the leading edge of the plume and the down-gradient property boundary; or
- 2) The monitoring well is vital in monitoring potential vertical movement of the plume into the deepest aquifer currently monitored at the facility.

Wells sampled in the fourth quarter 2011 were selected based on these criteria. FPC-TX intends to sample all of the monitoring wells and recovery wells during the first quarter 2012 sampling event.

7.3 Recommendations for the GWQAP

The GWQAP was originally developed in 1993 and was predicated on a two-aquifer hydrogeologic model. The current accepted hydrogeologic model consists of four water bearing zones (P, A, B, and C). The existing GWQAP does not accurately evaluate the impacts to groundwater. Background wells and assessment wells are not always located in the same water bearing zone. For example, monitoring well D-23 is the upgradient well for the equalization/aeration basins – lower aquifer and is used to assess monitoring wells D-32, D-33, and D-34. The current conceptual hydrogeologic model of the area indicates that monitoring wells D-23 and D-34 are screened in Zone C and monitoring wells D-32 and D-33 are screened in Zone B.

The GWQAP should be updated to account for changes in the conceptual hydrogeologic model at the site.

7.4 Other Recommendations

As discussed in the fourth quarter 2010 groundwater monitoring report, monitoring well P-12 appears to have failed. This monitoring well should be properly plugged and abandoned. In addition, several wells require minor maintenance in order for sample collection to occur (P-17, and P-23).

8.0 REFERENCES

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MFG, Inc., 2001. Proposed Modifications, Interim Measures Groundwater Monitoring. October.

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Tetra Tech, 2008. Current Conditions Technical Memorandum. August.

TABLES

WATER-LEVEL MEASUREMENT DATA FOURTH QUARTER 2011

TABLE 1

WELL NO.	TOP OF CASING ELEVATION (FT MSL)	DEPTH TO WATER (FT BMP)	GROUNDWATER ELEVATION (FT MSL)				
	(i i mozy	ZONE P					
P-6	23.87	13.08	10.79				
P-27	22.18	13.20	8.98				
P-28	23.97	17.04	6.93				
P-29	21.32	11.66	9.66				
P-30	23.26	9.86	13.40				
1 00 1		ZONE A					
P-1	26.04	22.45	3.59				
P-2	22.65	17.49	5,16				
P-3	22.66	18,75	3.91				
P-4	17.81	14.16	3.65				
P-7	23.76	18.39	5.37				
P-8	20.56	15.31	5,25				
P-9	22.84	13.95	8.89				
P-10	22.11	17.36	4.75				
P-11	22.79	12.15	10.64				
P-13	22.46	19.11	3.35				
P-14	18.54	14.48	4.06				
P-15	16.07	13.10	2.97				
P-18	20.73	17.02	3.71				
P-19	18.96	14.77	4.19				
P-20	20.92	16.00	4.92				
P-22	23.26	17.81	5.45				
P-23	21.14	NM	NM				
P-24	21.53	17.81	3.72				
P-31	21.88	15.64	6.24				
P-32	21.45	17.30	4.15				
P-33	20.95	15.41	5.54				
P-34	22.28	16.17	6.11				
P-35	22.68	17.07	5.61				
P-36	22.45	18.01	4.44				
P-38	22.93	17.42	5.51				
P-39	22.00	15.71	6.29				
P-40	21.09	12.55	8.54				
P-41	24.50	13.90	10.60				
P-42	24.31	18.30	6.01				
P-43	22.66	15.15	7.51				
P-45	21.11	15.38	5.73				
P-46	21.61	16.22	5.39				
P-47	20.69	15.91	4.78				
P-50	22.39	18.40	3.99				
P-51	21.83	16.30	5.53				
P-55	22.01	17.24	4.77				
P-56	17.47	14.98	2.49				
P-57	17.91	15.30	2.61				
P-67	23.66	17.10	6.56				
RS-1	22.32	NM 17.10	NM				
RS-2	21.99	17.16	4.83				
RS-3	24.03	NM	NM				
RS-4	21.90	19.80	2.10				
RS-5	22.72	18.30	4.42				

TABLE 1

WATER-LEVEL MEASUREMENT DATA FOURTH QUARTER 2011

WELL NO.	TOP OF CASING ELEVATION (FT MSL)	DEPTH TO WATER (FT BMP)	GROUNDWATER ELEVATION (FT MSL)
		ZONE B	
P-12	22.48	19.21	3.27
P-16	24.05	21.61	2.44
P-17	24.13	NM	NM
P-21	23,48	18.08	5.40
P-37	23.57	16.20	7.37
P-44	23.69	20.97	2.72
P-48	21.79	19.15	2.64
D-1	23.44	20.41	3.03
D-7	23.39	18.70	4.69
D-15	21.76	18.20	3.56
D-18	24.76	19.95	4.81
D-32	21.57	17.99	3.58
D-33	20.37	17.65	2.72
D-40	24.53	19.92	4.61
D-43	20.17	17.33	2.84
RD-3	23.18	19.48	3.70
	ZOI	NE C UPPER	
D-2	21.83	18.96	2.87
D-4	18.75	16.38	2.37
D-5	21.37	18.95	2.42
D-10	18.53	16,21	2.32
D-11	23.32	20.31	3.01
D-16	20.40	18.10	2.30
D-21	22.38	19.95	2.43
D-23	21.45	18.90	2.55
D-39	20.93	18.23	2.70
D-41	23.05	20.49	2.56
D-42	21.10	18.58	2.52
D-44	20.53	18.14	2.39
RD-1	23.76	NM	NM
RD-2	19.68	17.43	2.25
	ZOI	VE C LOWER	
D-3	21.31	18.62	2.69
D-6	20.82	18.22	2.60
D-8	20.52	17.84	2.68
D-9	20.52	17.83	2.69
D-12	23.08	20,35	2.73
D-13	22.84	20.10	2.74
D-14	23.05	20.32	2.73
D-19	20.72	17.95	2.77
D-22	21.53	18.95	2.58
D-34	20.52	18.03	2,49
3D-1	22.46	19.63	2.83
3D-3	21.89	19.33	2.56

Notes:

NM = Not Measured

MSL = Mean Sea Level

BMP = Below Measuring Point (Typically the top of PVC Casing)

TABLE 2

DNAPL MEASUREMENT RECORD FOURTH QUARTER 2011

WELL NO.	DEPTH TO PRODUCT	PRODUCT THICKNESS
P-3	ND	NC
P-12	ND	NC
P-36	ND	NC
P-56	ND	NC
P-57	ND	NC
D-2	ND	. NC
D-11	ND	NC
D-41	ND	NC
RS-6	NM	NM

Notes:

ND = The presence of product was not detected.

NC = Product thickness was not calculated because if was not detected.

TABLE 3

FIELD PARAMETERS FOURTH QUARTER 2011

		CONDUCTIVITY	Turbidity	TEMPERATURE
WELL NO.	pН	(mS/cm)_	(FTU)	(°C)
P-3	6.21	5400	54.6	25.7
P-4	6.71	13600	3.2	24.1
P-9	6.63	4370	26.8	27.5
P-10	6.60	15200	15200 12.1 25.	
P-12	6.34	8400	40.4	18.9
P-14	6.74	10000 2.30		24.1
P-15	6.60	18100	1.7	25.7
P-18	6.86	7190	18.1	24.4
P-24	9.23	4020	27.5	25.5
P-48	6.67	14000	26.1	23.4
P-50	6.69	12900	12.1	23.7
P-51	7.28	1010	2.7	25.7
P-55	7.02	1580	4.4	25.8
P-56	6.20	16000	4.1	24.4
P-57	5.98	16200	3.9	24.3
D-2	6.53	6880	1.8	24.2
D-3	6.88	6300	6300 34.5	
D-4	6.90	7960	25.9	23.3
D-5	6.83	6230	18.6	24.0
D-12	6.97	5570	108.0	26.7
D-13	7.72	5080	141.0	27.0
D-14	7.01	6200	43.6	26.7
D-16	6.90	6730	17.7	22.9
D-21	6.69	7730	3.1	23.7
D-32	6.84	12400	31.7	24.4
D-33	6.53	7360	6.6	23.0
D-34	9.79	6660	30.8	24.0
D-39	7.10	5040	8.4	23.4
D-41	6.55	7160	6.4	23.3
RS-1	6.59	6850	0.0	22.7
RS-4	7.03	4220	0.0	24.0
RS-5	6.93	3960	6.4	23.7
RD-1	7.24	6470	20.8	21.6

Notes:

NS = Not Sampled

NM - Not Measured

VOC ANALYTICAL RESULTS FOURTH QUARTER 2011

TABLE 4

Lab	Formosa		Formo	sa	Formo	osa	Forme	osa	Formo	sa	Form	
Well Number/ID	P-3	3	P-4		P-9)	P-1	0	P-12		P-14	
Lab Sample/ID	111206	141D	111206	1425	111206	141C	111206	1434	1112061411		111206142D	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL
vinyl chloride	< 1000	1000	< 5	5	21.26	5	< 5	5	2298	500	< 5	5
1,1-dichloroethene	< 1000	1000	< 5	5	. < 5	5	< 5	5	< 500	500	< 5	5
trans-1,2-dichloroethene	< 1000	1000	< 5	5	< 5	5	< 5	5	837	500	< 5	5
1,1-dichloroethane	1076	1000	< 5	5	41.1	5	< 5	5	4048	500	< 5	5
cis-1,2-dichloroethene	< 1000	1000	< 5	5	< 5	5	< 5	5	997	500	< 5	5
chloroform	1740	1000	< 5	5	< 5	5	< 5	5	9025	500	< 5	5
1,2-dichloroethane (EDC)	27792	1000	< 5	5	18.14	5	< 5	5	21392	500	< 5	5
benzene	< 1000	1000	< 5	5	< 5	5	< 5	5	1391	500	< 5	5
trichloroethene	< 1000	1000	< 5	5	17.24	5	< 5	5	1692	500	< 5	5
1,1,2-trichloroethane	< 1000	1000	< 5	5	< 5	5	< 5	5	1309	500	< 5	5
tetrachloroethene	< 1000	1000	< 5	5	< 5	5	< 5	5	774	500	< 5	5
chlorobenzene	< 1000	1000	< 5	5	< 5	5	< 5	5	< 500	500	< 5	5

Lab Well Number/ID Lab Sample/ID	Formosa P-15 1112061424		Formo P-18 111205	3 1525	Formo P-2- 111206	4 1418	Form P-4 111206	8 1439	Formo P-50 111206	0 143C	Form P-5 111206 Result	51 61432
Analyte	Result	RL	Result	RL	Result	RL.	Result	RL	Result	RL		RL
vinyl chloride	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
1,1-dichloroethene	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
trans-1,2-dichloroethene	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
1,1-dichloroethane	< 5	5	715.6	50	< 5	5	< 5	5	< 5	5	< 5	5
cis-1,2-dichloroethene	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
chloroform	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
1,2-dichloroethane (EDC)	6.26	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
benzene	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
trichloroethene	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
1,1,2-trichloroethane	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
tetrachloroethene	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5
chlorobenzene	< 5	5	< 50	50	< 5	5	< 5	5	< 5	5	< 5	5

Lab	Form	osa	Forme	osa	Form		Form		Formo		Form	
Well Number/ID	P-55		P-56		P-57		D-2		D-3		D-4	
Lab Sample/ID	111206142F		1112061422		1112051528		1112061412		1112061417		111206142B	
Analyte	Result	RL.	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
vinyl chloride	< 5	5	< 50000	50000	< 50000	50000	1596	250	< 5	5	< 5	5
1.1-dichloroethene	< 5	5	< 50000	50000	< 50000	50000	< 250	250	< 5	5	< 5	5
trans-1,2-dichloroethene	< 5	5	< 50000	50000	< 50000	50000	901.5	250	< 5	5	< 5	5
1,1-dichloroethane	< 5	5	< 50000	50000	< 50000	50000	4436.5	250	< 5	5	< 5	5
cis-1,2-dichloroethene	< 5	5	< 50000	50000	< 50000	50000	420.5	250	< 5	5	< 5	5
chloroform	< 5	5	110400	50000	74800	50000	4328.5	250	< 5	5	< 5	5
1,2-dichloroethane (EDC)	< 5	5	1722200	50000	851300	50000	7981	250	< 5	5	< 5	5
benzene	< 5	5	< 50000	50000	< 50000	50000	565	250	< 5	5	< 5	5
trichloroethene	< 5	5	< 50000	50000	< 50000	50000	969	250	< 5	5	< 5	5
1,1,2-trichloroethane	<5	5	< 50000	50000	< 50000	50000	< 250	250	< 5	5	< 5	5
tetrachloroethene	< 5	5	< 50000	50000	< 50000	50000	488.5	250	< 5	5	<5	5
chlorobenzene	< 5	5	< 50000	50000	< 50000	50000	< 250	250	< 5	5	< 5	5

TABLE 4

VOC ANALYTICAL RESULTS FOURTH QUARTER 2011

Lab	Formo	osa	Formo	sa	Forme	osa	Form	osa	Formo	osa	Form	iosa
Well Number/ID	D-5	i	D-1:	2	D-1:	3	D-1	4	D-10	6	D-2	21
Lab Sample/ID	111205	1526	111206	1415	111206	141B	111206	1414	111205	1527	111206	5143D
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	Result RL		RL.
vinyl chloride	< 5	5	187.6	100	88.63	5	< 5	5	52.45	5	< 5	5
1,1-dichloroethene	< 5	5	< 100	100	7.86	5	< 5	5	< 5	5	< 5	5
trans-1,2-dichloroethene	< 5	5	< 100	100	24.22	5	< 5	5	< 5	5	< 5	5
1,1-dichloroethane	< 5	5	< 100	100	332.35	5	< 5	5	< 5	5	< 5	5
cis-1,2-dichloroethene	< 5	5	< 100	100	18.08	5	< 5	5	< 5	5	< 5	5
chloroform	< 5	5	< 100	100	< 5	5	< 5	5	< 5	5	< 5	5
1,2-dichloroethane (EDC)	< 5	5	3346.8	100	< 5	5	10.91	5	< 5	5	< 5	5
benzene	< 5	5	< 100	100	11.05	5	< 5	5	< 5	5	< 5	5
trichloroethene	< 5	5	< 100	100	9.68	5	< 5	5	< 5	5	< 5	5
1,1,2-trichloroethane	< 5	5	< 100	100	< 5	5	< 5	5	< 5	5	< 5	5
tetrachloroethene	< 5	5	< 100	100	8	5	< 5	5	< 5	5	< 5	5
chlorobenzene	< 5	5	< 100	100	< 5	5	< 5	5	< 5	5	< 5	5

Lab	Form	osa	Formo	sa	Forme	osa	Form	osa	Forme	osa	Forn	ıosa
Well Number/ID	D-32		D-33	D-33		D-34		D-39		1	RS-1	
Lab Sample/ID	111205	1523	111205152A		1112051524		111206	1436	1112061435		111206141A	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
vinyl chloride	200.36	10	32.93	5	< 5	5	36.87	5	< 10000	10000	< 10000	10000
1,1-dichloroethene	25.7	10	< 5	5	< 5	5	< 5	5	< 10000	10000	< 10000	10000
trans-1,2-dichloroethene	23.22	10	< 5	5	< 5	5	13,61	5	< 10000	10000	< 10000	10000
1,1-dichloroethane	471.75	10	30.88	5	12,13	5	66.66	5	< 10000	10000	< 10000	10000
cis-1,2-dichloroethene	39.18	10	< 5	5	< 5	5	10.92	5	< 10000	10000	< 10000	10000
chloroform	18.1	10	< 5	5	< 5	5	7.52	5	15420	10000	22740	10000
1,2-dichloroethane (EDC)	42.44	10	16.27	5	6.97	5	263.9	5	261120	10000	187460	10000
benzene	< 10	10	< 5	5	< 5	5	6.92	5	< 10000	10000	< 10000	10000
trichloroethene	< 10	10	< 5	5	< 5	5	43.38	5	< 10000	10000	< 10000	10000
1,1,2-trichloroethane	< 10	10	< 5	5	< 5	5	< 5	5	< 10000	10000	< 10000	10000
tetrachloroethene	< 10	10	< 5	5	< 5	5	< 5	5	< 10000	10000	< 10000	10000
chlorobenzene	12.2	10	< 5	5	< 5	5	< 5	5	< 10000	10000	< 10000	10000

Lab	Form	osa	Forme	sa	Form	osa	
Well Number/ID	RS-	-4	RS-	5	RD-1		
Lab Sample/iD	111206		111206	1420	1112061413		
Analyte	Result	RL	Result	RL	Result	RL	
vinyl chloride	< 5	5	< 5	5	613.2	50	
1,1-dichloroethene	< 5	5	< 5	5	56.5	50	
trans-1,2-dichloroethene	< 5	5	< 5	5	348.4	50	
1,1-dichloroethane	< 5	5	< 5	5	1792.2	50	
cis-1,2-dichloroethene	< 5	5	< 5	5	195.4	50	
chloroform	< 5_	5	< 5	5	1259.5	50	
1,2-dichloroethane (EDC)	11.95	5	10.75	5	755.3	50	
benzene	< 5	5	< 5	5	209.3	50	
trichloroethene	5.4	5	5.75	5	377.4	50	
1,1,2-trichloroethane	14.67	5	13.86	5	87.3	50	
tetrachloroethene	< 5	5	< 5	5	174.8	50	
chlorobenzene	< 5	5	< 5	5	< 50	50	

Notes:

See Appendix E for complete list of VOC analytes

See Appendix J for Data Evaluation Checklists

RL= Reporting Limit
All results listed in μg/L

QA/QC - DUPLICATE SAMPLES VOC ANALYTICAL RESULT FOURTH QUARTER 2011

TABLE 5

Lab	Formo	sa	Forme	osa	TestAm	erica	Formo	sa	Form	osa	TestAm	erica
Well Number/ID	D-33	3	Dup-	01	D-33	3	P-5	5	Dup-	02	P-5	5
Lab Sample/ID	1112051	152A	111205	152B	600-467	'69-1	111206		111206		600-46	
Analyte	Result	RL	Result	RL	Resuit	RL	Result	RL	Result	RL	Result	RL
vinyl chloride	32.93	5	35.99	5	42	5	< 5	5	< 5	5	< 5	5
1,1-dichloroethene	< 5	5	5.04	5	5.8	5	< 5	5	< 5	5	< 5	5
trans-1,2-dichloroethene	< 5	5	< 5	5	4.6 J	5	< 5	5	< 5	5	< 5	5
1.1-dichloroethane	30.88	5	31.59	5	38	5	< 5	5	< 5	5	< 5	5
cis-1,2-dichloroethene	< 5	5	< 5	5	5.1	5	< 5	5	< 5	5	< 5	5
chloroform	< 5	5	< 5	5	< 5	5	< 5	5	< 5	5	< 5	5
1,2-dichloroethane (EDC)	16.27	5	14.99	5	14	5	< 5	5	< 5	5	< 5	5
benzene	< 5	5	< 5	5	0.58 J	5	< 5	5	< 5	5	< 5	5
trichloroethene	< 5	5	< 5	5	4.0 J	5	< 5	5	< 5	5	< 5	5
1,1,2-trichloroethane	< 5	5	< 5	5	< 5	5	< 5	5	< 5	5	< 5	5
tetrachloroethene	< 5	5	< 5	5	1.6 J	5	< 5	5	< 5	5	< 5	5
chlorobenzene	< 5	5	< 5	5	1.4 J	5	< 5	5	< 5	5	< 5	5

Lab	Form	osa	Form		TestAmerica		
Well Number/ID	P-9	9	Dup-	03	₽-9		
Lab Sample/ID	111206	141C	111206	1421	600-46769-3		
Analyte	Result	RL	Result	RL	Result	RL	
vinyl chloride	21.26	5	18.05	5	18	5	
1,1-dichloroethene	< 5	5	< 5	5	< 5	5	
trans-1,2-dichloroethene	< 5	5	< 5	5	< 5	5	
1,1-dichloroethane	41.1	5	35.71	5	37	5	
cis-1,2-dichloroethene	< 5	5	< 5	5	2.0 J	5	
chloroform	< 5	5	< 5	5	< 5	5	
1,2-dichloroethane (EDC)	18.14	5	18.81	5	16	5	
benzene	< 5	5	< 5	5	< 5	5	
trichloroethene	17.24	5	14.96	5	17	5	
1,1,2-trichloroethane	< 5	5	<5	5	< 5	5	
tetrachloroethene	< 5	5	< 5	5	< 5	5	
chlorobenzene	< 5	5	< 5	5	< 5	5	

Notes:

All results listed in µg/L

J = Estimated Value

RL = Reporting Limit

TABLE 6

TRIP AND FIELD BLANK ANALYTICAL RESULTS FOURTH QUARTER 2011

l ab	Formosa		Formosa		Formosa		Test Am	erica	Form	osa	Formosa		Formosa	
Lab Well Number/ID	Trip Bla		Trip BI		Trip Bla		Trip B		Field B		Field BI		Field B	
Lab Sample/ID	111205		1112061441		111206		1.1,5 5.	i Milit	111205		111206		111206	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
dichlorodifluromethane	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
chloromethane	<5	5	<5	5	<5	5	< 10	10	<5	5	<5	5	<5	5
vinyl chloride	<5	5	<5	5	<5	5	< 10	10	<5	5	<5	5	<5	5
bromomethane	<5	5	<5	5	<5	5	< 10	10	<5	5	<5	5	<5	5
chloroethane	<5	5	<5	5	<5	5	< 10	10	<5	5	<5	5	<5	5
trichtorofluoromethane	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
1,1-dichloroethene	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
methylene chloride	<5	5	<5	5	<5	5	< 10	10	<5	5	<5	5	<5 .5	5 5
trans-1,2-dichloroethene	<5	5	<5	5	<5 .c	5 5	< 5	5 5	<5 <5	5 5	<5 <5	5 5	<5 <5	5
1,1-dichloroethane	<5 <5	<u>5</u>	<5 <5	<u>5</u>	<5 <5	5	< 5 < 5	5	<5	5	<5	5	<5	5
cis-1,2-dichloroethene	<5 <5	5	<5 <5	5	<5 <5	5	NA NA	NA	<5	5	<5	5	<5	5
2,2-dichloropropane bromochloromethane	<5	5	<5 <5	5	<5	5	NA	NA	<5 <5	5	<5	5	<5	5
chloroform	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,1,1-trichloroethane	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,2-dichloroethane (EDC)	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,1-dichloropropene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
benzene	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
carbon tetrachloride	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,2-dichloropropane	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
trichloroethene	<5	5	<5	5	<5	5	< 5	5	<5 -F	5	<5 -5	5	<5 -F	5
dibromomethane	<5	5	<5	5	<5	5	NA . F	NA	<5 .5	5	<5 <5	5 5	<5 <5	5
bromodichloromethane	<5 .5	5 5	<5 .c	5 5	<5	5 5	< 5 < 5	5 5	<5 <5	5 5	<5 <5	5 5	<5	5 5
trans-1,3-dichloropropene	<5 <5	5 5	<5 <5	5 5	<5 <5	5	< 5 < 5	5	<5	5	<5	5	<5	5
cis-1,3-dichloropropene toluene	<5	5	<5 <5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1.1.2-trichloroethane	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,3-dichloropropane	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
dibromochloromethane	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,2-dibromoethane	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
tetrachloroethene	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
chlorobenzene	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,1,1,2-tetrachloroethane	<5	5	<5	5	<5	5	NA	NΑ	<5	5	<5	5	<5 .//	5
ethylbenzene	<5 .c	5	<5	5 5	<5 .E	5 5	< 5 NA	5 NA	<5 <5	5 5	<5 <5	5 5	<5 <5	5 5
m+p-xylene	<5 <5	<u>5</u>	<5 <5	5	<5 <5	5 5	< 5	5 5	<5 <5	<u>5</u>	<5 <5	5	<5 <5	5
styrene bromoform	<5 <5	5	<5 <5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
o-xylene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
1,1,2,2-tetrachloroethane	<5	5	<5	5	<5	5	< 5	5	<5	5	<5	5	<5	5
1,2,3-trichloropropane	<5	5	<5	5	<5	5	NA	NΑ	<5	5	<5	5	<5	5
isopropylbenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
bromobenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
2-chlorotoiuene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
n-propylbenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
4-chlorotoluene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
1,3,5-trimethylbenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5 	5	<5	5
1,2,4-triethylbenzene	<5	5	<5	5	<5 .5	5	NA NA	NA	<5 <5	5 5 ·	<5 <5	5 5	<5 <5	5 5
tert-butylbenzene	<5 <5	5 5	<5	5 5	<5 <5	5 5	NA NA	NA NA	<5 <5	5	<5 <5	5	<5	5
1,3-dichlorobenzene	<5 <5	5 5	<5 <5	5 5	<5 <5	5 5	NA NA	NA	<5 <5	5	<5	5.	√5 <5	5
sec-butylbenzene 1,4-dichlorobenzene	<5	5	<5	5	<5	5	NA	NA	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5	<5	5	<5	5
4-isopropyltoluene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
1,2-dichlorobenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
n-butvibenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
1,2-dibromo-3-chloropropane	<5	5	<5	5	<5	5	NA	NA	<5	. 5	<5	5	<5	5
1,2,4-trichlorobenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
naphthalene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
1,2,3-trichlorobenzene	<5	5	<5	5	<5	5	NA	NA	<5	5	<5	5	<5	5
hexachtorobutadiene	<5	5	<5	5_	<5	5	NA	NA_	<5	5	<5	_5	<5	5
acetone	NA	NA	NA	NA	NA	N'A	< 10	10	NA	NA	NA	NA	NA	NA
carbon disulfide	NA	NA	NA	NA	NA	NA	< 5	5	NA.	NA	NA	NA	NA NA	NA
2-hexanone	NA NA	NA	NA NA	NA NA	NA NA	NA NA	< 10	10	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
4-methyl-2-pentanone	NA	NA	<u>NA</u>	NA.	<u>NA</u>	NA	< 10	10	NA	NA	I INY	IN/A	I INA	PAN

Notes:

NA=Not Reported
RL= Reporting Limit
All results listed in ug/L

RESULTS OF STATISTICAL EVALUATION FOURTH QUARTER 2011

TABLE 7

	FOURTH	1 QUARTER									t-STATISTIC	
WELL	2011	SAMPLE			(EDC) (µg/L	.)			CALCULATED	D.O.F.	CRITICAL	TEST
NUMBER	(EDC	C) (µg/L)						n	t-VALUE2	(n-1)	VALUES	RESULTS
	RL	RESULTS	DATE	RL	RESULTS	MEAN	STD, DEV.					
			Nov-93	250	1,556							
P-3	1000	27792	Feb-94	250	1,991	1,559.3	991.0	4	23.676	3	4.541	FAIL
			Jun-94	5,000	2,500				,			
			Jan-95	5	190							
			Jan-02	5	7.65							
P-4	5	2.5	Apr-02	5	7.54	7.69	0.49	4	-9.432	3	4.541	PASS
			Jul-02	5	8.37	İ				l		
			Oct-02	5	7.2	<u> </u>		_				
			May-93	25,000	693,900			١.				D. 00
P-12	500	21392	Aug-93	25,000	730,993	732714	514545	4	-1.236	3	4.541	PASS
			Nov-93	25,000	123,720							
			Feb-94	25,000	1,382,242			<u> </u>		ļ		
			Jul-03	5	2.5		_			_]	
P-14	5	2.5	Oct-03	5	2.5	2.5	0	4	0	3	0	PASS
			Apr-04	5	2.5							
			Jul-04	5	2.5	<u></u>						
	_		May-93	5	2.5			١.		_		2100
P-15	5	6.26	Aug-93	5	2.5	4.88	4.75	4	0.261	3	4.541	PASS
			Nov-93	5	2.5					1		
ļ			Feb-94	5	12.0				 		 	
 			Jan-02	5	33.6		405.40		4.050		4 544	PASS
P-18	50	25	Apr-02	250	347.5	500.90	405.46	4	-1.050	3	4.541	PASS
			Jul-02	250	640.0					ĺ		
		-	Oct-02	250	982.5	 		 				ļ
 _	_	0.5	May-93	5	8.0	F0.75	00.47	4	0.400	3	4.541	PASS
P-24	5	2.5	Aug-93	5	6.0	52.75	92.17	4	-0.488	3	4.541	PASS
ļ			Nov-93	5	6.0				-			
ļ			Feb-94 Dec-94	5 5	191.0 2.5			_		-		ļ
D 40	5	0.5	Dec-94 Mar-95	5 5	2.5 2.5	2.50	0	4	0	3	4.541	PASS
P-48	5	2.5	Jul-95	5 5	2.5 2.5	2.50	٠	4	"	"	4.341	FAOO
			Jul-95 Oct-95	5 5	2.5 2.5							
			Nov-94	5	2.5	 	 	\vdash		-	 	
P-50	5	2.5	Dec-94	5 5	2.5 2.5	4.13	3,25	4	-0.447	3	4.541	PASS
P-50	o i	∠,5	Mar-95	5 5	2.5 2,5	4.13	ن.ع.ن	"	-0.447	٠	4.041	1.700
			Jul-95	5	2,3 9.0		1					
-			Jul-93	5	2.5	†	 	\vdash				
P-51	5	2.5	Oct-03	5	2.5	2.50	0	4	0	3	4.541	PASS
F-31	ا	د.ي	Apr-04	5	2.5		1]			7.571	1,7,00
- Constitution of the Cons			Jul-04	5	2.5							
			Nov-94	5	2.5			-				<u> </u>
P-55	5	2.5	Dec-94	5	2.5	2.50	0	4	0	3	4.541	PASS
1 *35	ا	2.0	Mar-95	5	2.5		•	-		١	""	1,100
			Jul-95	5 5	2.5							
L			ี บนเ-ชอ]	2.0	<u> </u>	L	1	<u> </u>	1	L	<u> </u>

RESULTS OF STATISTICAL EVALUATION FOURTH QUARTER 2011

TABLE 7

	FOURTH	I QUARTER		BACI	(GROUND SA	MPLES					t-STATISTIC	
WELL		SAMPLE		_,,,,,,	(EDC) (µg/L				CALCULATED	D.O.F.	CRITICAL	TEST
NUMBER		C) (µg/L)			() (F-3	,		n	t-VALUE2	(n-1)	VALUES	RESULTS
	RL	RESULTS	DATE	RL	RESULTS	MEAN	STD. DEV.			, ,		
			Jan-02	50,000	686,720							
P-56	50000	1722200	Apr-02	50,000	783,480	720550	77699	4	11.530	3	4.541	FAIL
			Jan-03	50,000	626,680							
			Apr-03	50,000	785,320							
			Oct-03	50,000	548,500							
P-57	50000	851300	Jan-04	50,000	798,700	620775	125375	4	1.645	3	4.541	PASS
			Apr-04	50,000	616,400							
			Jul-04	50,000	519,500	1						
			May-93	5	104.0							
D-2	250	7981	Aug-93	5	39.0	41.9	44.02	4	161.314	3	4,541	FAIL
			Nov-93	5	22.0							
			Feb-94	5	2.5							
			May-93	10	470.0							
D-3	5	2.5	Aug-93	250	290.0	815.6	1139.30	4	-0.638	3	4.541	PASS
			Nov-93	5	2.5							1
			Jun-94	5,000	2,500.0					ļ		
			May-93	5	2.50							
D-4	5	2.5	Aug-93	5	2.50	63.6	122.25	4	-0.447	3	4.541	PASS
			Nov-93	5	247.00	1						
			Feb-94	5	2,50							
			Jan-03	5	2.5		_	١.		_		5.55
D-5	5	2.5	Apr-03	5	2.5	2.5	0	4	0	3	4.541	PASS
			Jul-03	5	2.5							
			Oct-03	5	2.5					ļ		
D.40	100	00400	Jan-02	2,500	40,020	40,353	3254.01	4	-10.172	3	4.541	PASS
D-12	100	3346,8	Apr-02 Jul-02	2,500 2,500	39,692 44,769	40,353	3204,01	4	-10.172		4.341	PASS
			Oct-02	2,500	36,930							
			Jan-02	2,500 5	75.20					-		
D-13	5	2,5	Apr-02	5	19.03	26.9	32,92	4	-0.662	3	4.541	PASS
5-10		2,0	Jul-02	5	10.76	-5.5	J	•	1 2.302	ັ		
			Oct-02	5	2.50]		İ		
			Jul-03	5	2.5			 		 		
		40.04	i	i	•	0.5		١,	∞	3	4.544	DOCCIDI M
D-14	5	10.91	Oct-03	5	2.5	2.5	0	4	~	3	4.541	POSSIBLE
			Apr-03	5	2.5							FAIL
			Jน ! -03	5	2.5		L	L				
-			Nov-93	5	23.0							
D-16	5	2.5	Feb-94	5	75.0	25.8	34.23	4	-0.608	3	4,541	PASS
			Jun-94	5	2.5							
			Jul-94	5	2.5							
			Dec-94	5	15.0							
D-21	5	2.5	Mar-95	5	2.5	5.6	6.25	4	-0.447	3	4.541	PASS
			Jul-95	5	2.5	1						
			Oct-95	5	2.5	<u>l</u>]					

TABLE 7

RESULTS OF STATISTICAL EVALUATION FOURTH QUARTER 2011

	FOURTH	QUARTER		BAC	KGROUND SA	MPLES					t-STATISTIC	
WELL	2011	SAMPLE			(EDC) (µg/L)		n	CALCULATED	D.O.F.	CRITICAL	TEST
NUMBER		C) (μg/L)							t-VALUE2	(n-1)	VALUES	RESULTS
	RL	RESULTS	DATE	RL	RESULTS	MEAN	STD. DEV.					
			Jan-95	5	180.0							
D-32	10	42.44	Mar-95	5	2.5	883.1	1546.53	4	-0.486	3	4.541	PASS
	İ		Jul-95	250	3200.0							
			Aug-95	5	150.0							
			Dec-94	5	2.5]					
D-33	5	16.27	Mar-95	5	2.5	2.5	0	4	∞	3	4.541	POSSIBLE
			Jul-95	5	2.5							FAIL
		•	Oct-95	5	2.5							
			Dec-94	5	2.5				j			
D-34	5	6.97	Mar-95	5	2,5	2.5	0	4	∞	3	4.541	POSSIBLE
			Jul-95	5	2,5				1			FAIL
			Oct-95	5	2.5							
			Jan-04	5	2.5							
D-41	10000	261,120	Apr-04	5	2.5	2.5	0	4	∞	3	4.541	POSSIBLE
			Jul-04	5	2.5				1			FAIL
			Oct-04	5	2.5							

Notes:

¹⁾ For statistical purposes, 1/2 RL is used when results are reported below the RL.

²⁾ Calculated t-Value = [Sample Results - Mean] / [Std Dev x SQRT (1 + 1/n)]

TABLE 8

EQUALIZATION / AERATION / STORM WATER BASINS BACKGROUND DATA

JANUARY 2009 - DECEMBER 2011

				1,2-Dic	hloroethane			1,1-Dic	hloroethan	2	······································	1,1-Di	chloroethen	ie .
Well			RL	Result	Combined	Standard	RL	Result	Combined	Standard	RL	Result	Combined	Standard
Number	Date	n	(µg/L)	(µg/L)	Mean	Deviation	(µg/L)	(µg/L)	Mean	Deviation	(µg/L)	(µg/L)	Mean	Deviation
P-22	Mar-09	1	5	2.50			5	52.99			5	2.50		
	Mar-10	2	5	2.50	2.50	0	5	65.67	44.8	26.03	5	2.50	2.50	0
	Mar-11	3	5	2.50			5	15.6			5	2.50		
P-34	Mar-09	1	5	2.50			5	2.50			5	2.50		
	Mar-10	2	5	2.50			5	2.50			5	2.50		
	Mar-11	3	5	2.50	2.50	0	5	2.50	2.50	0	5	2.50	2.50	o
P-45	Mar-09	4	5	2.50	2.50	U	5	2.50	2.30	0	5	2.50	2.30	Ų
	Mar-10	5	5	2.50	2.50		5	2.50			5	2.50		
	Mar-11	6	5	2.50			5	2.50			5	2.50		
D-1	Mar-09	1	1000	30776.00			1000	500.00			1000	500.00		
	Mar-10	2	1000	17820.00	21111.33	8510.52	1000	500.00	500.00	0	1000	500.00	500.00	0
	Mar-11	3	1000	14738			1000	500.00			1000	500.00		
D-23	Mar-09	1	5	2.50			5	2.50			5	2.50		
Į i	Mar-10	2	5	2.50	2.50	0	5	2.50	2.50	0	5	2.50	2.50	0
	Mar-11	3	5	2.50			5	2.50			5	2.50		

				Chi	oroform			Ε	enzene			Vin	yl Chloride	
Well			RL	Result	Combined	Standard	RL	Result	Combined	Standard	RL	Result	Combined	Standard
Number	Date	n	(µg/L)	(µg/L)	Mean	Deviation	(µg/L)	(µg/L)	Mean	Deviation	(µg/L)	(µg/L)	Mean	Deviation
P-22	Mar-09	1	5	2.50			5	2.50	······································		5	17.11		
	Mar-10	2	5	2.50	2.50	0	5	2.50	2.50	0.00	5	2.50	7.37	8.44
	Mar-11	3	5	2.50			5	2.50			5	2.50		
P-34	Mar-09	1	5	2.50			5	2.50			5	2.50		
	Mar-10	2	5	2.50			5	2.50			5	2.50		
	Mar-11	3	5	2.50	2.50	0	5	2.50	2.50	0	5	2.50	2,50	0
P-45	Mar-09	4	5	2.50	2.50	U	5	2.50	2.50	U I	5	2.50	2.50	v
	Mar-10	5	5	2.50	2.50		5	2.50			5	2.50		
	Mar-11	6	5	2.50			5	2.50			5	2.50		
D-1	Mar-09	-4	1000	500.00			1000	500.00			1000	500.00		
	Mar-10	2	1000	500.00	500.00	0	1000	500.00	500.00	0	1000	500.00	500.00	0
	Mar-11	3	1000	500.00			1000	500.00			1000	500.00		
D-23	Mar-09	1	5	2.50			5	2.50			5	2.50		
	Mar-10	2	5	2.50	2.50	0	5	2.50	2.5	0	5	2.50	2.50	0
	Mar-11	3	5	2.50			5	2.50			5	2.50		

Notes

The background data are calculated as a three-year moving window, as described in Environeering, October 1993.

When results are below the detection limit, 1/2 the RL is used for statistical purposes.

The Combined Mean for P-34 and P-45 is calculated as (1/2 mean P-34 + 1/2 mean P-45)

P-22 is the Upgradient Well for the Stormwater Basin - Upper Aquifer

P-34 and P-45 are the Upgradient Wells for the Equalization/Aeration Basins - Upper Aquifer

D-1 is the Upgradient Well for the Stormwater Basin - Lower Aquifer

D-23 is the Upgradient Well for the Equalization/Aeration Basins - Lower Aquifer

When all results are below varying RL, the Standard Deviation is not calculated, but is expressed as 0.

TABLE 9

EQUALIZATION / AERATION BASINS - UPPER AQUIFER

STATISTICAL COMPARISON (t-TEST)

Note: Wells P-34 and P-45 are the Upgradient Wells for the Equalization/Aeration Basins - Upper Aquifer

						1,2	2-Dichloroethan	е		
Well Number	Date	n	RL (µg/L)	Result (µg/L)	Combined Mean	Combined Std Dev	Calculated t-value	D.O.F. (n-1)	t-statistic critical values	Test Results
P-19	Mar-11	6	50	25	2.5	0	0	5	3.365	PASS
P-20	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-33	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-47	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-67	Mar-11	6	5	7.92	2.5	0	∞	5	3.365	P. FAIL

	, , , , , , , , , , , , , , , , , , , 					1,1	-Dichloroethen	е		
Well Number	Date	n	RL (µg/L)	Result (µg/L)	Combined Mean	Combined Std Dev	Calculated t-value	D.O.F. (n-1)	t-statistic critical values	Test Results
P-19	Mar-11	6	50	25	2.5	0	0	5	3.365	PASS
P-20	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-33	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-47	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-67	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS

							Benzene			
Well Number	Date	n	RL (µg/L)	Result (µg/L)	Combined Mean	Combined Std Dev	Calculated t-value	D.O.F. (n-1)	t-statistic critical values	Test Results
P-19	Mar-11	6	50	25	2.5	0	0	5	3.365	PASS
P-20	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-33	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-47	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-67	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS

Notes:

P. FAIL = Possible Fail

TABLE 9

EQUALIZATION / AERATION BASINS - UPPER AQUIFER

STATISTICAL COMPARISON (t-TEST)

Note: Wells P-34 and P-45 are the Upgradient Wells for the Equalization/Aeration Basins - Upper Aquifer

						1,1	-Dichloroethan	ie		
Well Number	Date	n	RL (µg/L)	Result (µg/L)	Combined Mean	Combined Std Dev	Calculated t-value	D.O.F. (n-1)	t-statistic critical values	Test Results
P-19	Mar-11	6	50	481.7	2.5	0	∞	5	3.365	P. FAIL
P-20	Mar-11	6	5	201.94	2.5	0	∞	5	3.365	P. FAIL
P-33	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-47	Mar-11	6	5	16.51	2.5	0	∞	5	3.365	P. FAIL
P-67	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS

							Chloroform	***************************************		
Well Number	Date	n	RL (µg/L)	Result (µg/L)	Combined Mean	Combined Std Dev	Calculated t-value	D.O.F. (n-1)	t-statistic critical values	Test Results
P-19	Mar-11	6	50	25	2.5	0	0	5	3.365	PASS
P-20	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-33	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-47	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-67	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS

							Vinyl Chloride			
Well Number	Date	n	RL (µg/L)	Result (µg/L)	Combined Mean	Combined Std Dev	Calculated t-value	D.O.F. (n-1)	t-statistic critical values	Test Results
P-19	Mar-11	6	50	116.1	2.5	0	∞	5	3.365	P. FAIL
P-20	Mar-11	6	5	148.84	2.5	0	∞	5	3.365	P. FAIL
P-33	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-47	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS
P-67	Mar-11	6	5	2.50	2.5	0	0	5	3.365	PASS

Notes:

P. FAIL = Possible Fail

TABLE 10

EQUALIZATION / AERATION BASINS - LOWER AQUIFER STATISTICAL COMPARISON (t-TEST) Note: D-23 is the Upgradient Well for the Equalization/Aeration Basins - Lower Aquifer

		*****		************		1,2-Di	chloroethane							1,1-Di	chloroethane			
Well			RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	n	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
D-32	Mar-11	3	5	32.86	2.5	0	∞	2	6.965	P. FAIL	5	262.12	2.5	0	∞	2	6.965	P. FAIL
	May-11	3	10	34.26	2.5	0	•	2	6.965	P. FAIL	10	339.28	2.5	0	•c	2	6.965	P. FAIL
	Aug-11	3	10	37.08	2.5	0	∞	2	6.965	P. FAIL	10	351.62	2.5	0	∞	2.	6.965	P. FAIL
	Nov-11	3	10	42.44	2.5	0	∞	2	6.965	P. FAIL	10	471.75	2.5	٥	••	2	6.965	P. FAIL
D-33	Mar-11	3	5	18.80	2.5	Ö	∞α	2	6,965	P. FAIL	5	32.02	2.5	0	90	2	6.965	P. FAIL
l i	May-11	3	. 5	16.73	2.5	0	80	2	6.965	P. FAIL	5	30.81	2.5	0	∞	2	6.965	P. FAIL
	Aug-11	3	5	15.36	2.5	0	- ∞	2	6.965	P. FAIL	5	28.82	2.5	0	∞	2	6.965	P. FAIL
1	Nov-11	3	5	16.27	2.5	0	**	2	6.965	P. FAIL	5	30.88	2.5	0	_ ∞	2	6.965	P. FAIL
D-34	Mar-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS
	May-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS
	Aug-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS
	Nov-11	3	5	6.97	2.5	0	∞ ∞	2	6.965	P. FAIL	5	12.13	2.5	0	90		6.965	P. FAIL

		- trans			······································	1,1-Die	chloroethene				1000			Ch	loroform			
Well			RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	n	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
D-32	Mar-11	3	5	11.30	2.5	0	90	2	6.965	P, FAIL	5	2.50	2.5	0	0	2	6.965	PASS
	May-11	3	10	10.18	2.5	0	∞	2	6.965	P. FAIL	10	5.00	2.5	0	0	2	6.965	PASS
	Aug-11	э	10	5.00	2.5	0	0	2	6.965	PASS	10	5.00	2.5	0	0	2	6.965	PASS
	Nov-11	3	10	25.70	2.5	0	20	2	6.965	P. FAIL	10	18.10	2.5	0	∞ .	2	6.965	P. FAIL
D-33	Mar-11	3	5	6.19	2.5	0	~	2	6.965	P. FAIL	5	2.50	2.5	0	0	2	6.965	PASS
į į	May-11	з	5	5.16	2.5	0	∞ ∞	2	6.965	P. FAIL	5	2.50	2.5	0	0	2	6.965	PASS
1	Aug-11	3	5	2.50	2.5	Ō	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS
	Nov-11	3	5	2.50	2.5	ō	0	2	6.965	PASS	5	2,50	2.5	0	0	2	6.965	PASS
D-34	Mar-11	3	È	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS
	May-11	3	5	2.50	2,5	0	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS
	Aug-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS
	Nov-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	0	0	2	6.965	PASS

							3enzene							Vin	/I Chloride			
Well		T	RL	Result	Combined	Combined	Calculated	D.Q.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	п	(µg/L)	(µg/L)	Mean	Std Dev	t-value	· (n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
D-32	Mar-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	14.10	2.5	0	∞	2	6.965	P. FAIL
	May-11	3	10	5.00	2.5	0	0	2	6.965	PASS	10	5.00	2.5	0	0	2	6.965	PASS
	Aug-11	3	10	5.00	2.5	0	0	2	6.965	PASS	10	31.16	2.5	0	∞ '	2	6.965	P. FAIL
	Nov-11	3	10	5.00	2.5	0	0	2	6.965	PASS	10	200.36	2.5	0	∞	2	6.965	P. FAIL
D-33	Mar-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	30.05	2.5	0 .	∞	2	6.965	P. FAIL
	May-11	3	5	2.50	2.5	0	٥	2	6.965	PASS	5	35.32	2.5	0	∞	2	6.965	P. FAIL
	Aug-11	3	5	2.50	2.5	o	م ا	2	6.965	PASS	5	30.58	2.5	0	∞	2	6.965	P. FAIL
	Nov-11	3	5	2.50	2.5	0	٥	2	6.965	PASS	5	32.93	2.5	0	∞	2	6.965	P. FAIL
D-34	Mar-11	3	5	2.50	2.5	ō	0	2	6.965	PASS	- 5	2.50	2.5	0	0	2	6.965	PASS
- -	May-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	٥	0	2	6.965	PASS
}	Aug-11	3	5	2.50	2.5	0	0	2	6.965	PASS	5	2.50	2.5	О	0	2	6.965	PASS
	Nov-11	3	5	2.50	2.5	Ó	0	2	6.965	PASS	5	2.50	2.5	٥	0	2	6.965	PASS

Notes:

P. FAIL = Possible Fail

TABLE 11

STORM WATER BASIN - UPPER AQUIFER STATISTICAL COMPARISON (t-TEST) Note: P-22 is the Upgradient Well for the Stormwater Basin - Upper Aquifer

						1,2-Dict	loroethane							1,1-Di	chloroethane			
Well	,		RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	n	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
P-12	Mar-11	3	500	15435	2.5	0.0	90	2	6.965	P. FAIL	500	3766	44.8	26.0	123.800	2	6.965	FAIL
	May-11	3	500	4424	2.5	0.0	•	2	6.965	P. FAIL	500	3128	44.8	26.0	102.575	2	6.965	FAIL.
	Aug-11	3	500	16769	2.5	0.0	- 00	2	6.965	P. FAIL	500	3031	44.8	26.0	99.348	2	6.965	FAIL
1	Nov-11	3	500	21392	2.5	0.0	∞	2	6.965	P. FAIL	500	4048	44.8	26.0	133,182	2	6.965	FAIL,
P-31	Mar-11	3	5	121.06	2.5	0.0	00	2	6.965	P. FAIL	5	142.94	44.8	26.0	3.267	2	6.965	PASS
P-48	Mar-11	3	5	2.50	2.5	0.0	0	2	6.965	PASS	- 5	2.50	44.8	26.0	-1.406	2	6.965	PASS
	May-11	3	5	2.50	2.5	0.0	l 0	2	6.965	PASS	5	2.50	44.8	26.0	-1.406	2	6.965	PASS
	Aug-11	3	5	2.50	2.5	0.0	l 0	2	6,965	PASS	5	2.50	44.8	26.0	-1.406	2	6.965	PASS
ľ	Nov-11	3	5	2.50	2.5	0.0	Ö	2	6.965	PASS	5	2.50	44.8	26.0	-1.406	2	6.965	PASS

***************************************			·······	······································		1,1-Dic	nloroethene							Cl	loroform			
Well			RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	л	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
P-12	Mar-11	3	500	250	2.5	0.0	0	2	6.965	PASS	500	7868	2.5	0.0	8	2	6.965	P. FAIL
	May-11	зΙ	500	250	2.5	0.0	0	2	6.965	PASS	500	6051	2.5	0.0	∞	2	6.965	P. FAIL
1	Aug-11	3	500	250	2.5	0.0	0	2	6,965	PASS.	500	6236	2.5	0.0	∞ ∞	2	6.965	P. FAIL
[]	Nov-11	3	500	250	2.5	0.0	o	2	6.965	PASS	500	9025	2.5	0.0	× ×	2	6.965	P. FAIL
P-31	Mar-11	3	5	2.50	2.5	. 0.0	0	2	6.965	PASS	5	2.50	2.5	0.0	0	2	6.965	PASS
P-48	Mar-11	3	5	2.50	2.5	0.0	0	2	6.965	PASS	5	2.50	2.5	0.0	0	2	6.965	PASS
	May-11	3	5	2.50	2.5	0.0	. 0	2	6.965	PASS	5	2.50	2.5	0.0	0	2	6.965	PASS
	Aug-11	3	5	2.50	2.5	0.0	0	2	6.965	PASS	5	2,50	2.5	0.0	0	2	6.965	PASS
	Nov-11	3	5	2.50	2.5	0.0	Ö	2	6.965	PASS	5	2.50	2.5	0.0	0	2	6.965	PASS

						Be	nzene			~****				Vin	yl Chloride			
Well			RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	n	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
P-12	Mar-11	3	500	1244	2.5	0.0	∞	2	6.965	P. FAIL	500	2020	7.4	8.4	206.64	2	6.965	FAIL
	May-11	3	500	992	2.5	0.0	•	2	6.965	P. FAIL	500	1992	7.4	8.4	203.76	2	6.965	FAIL
	Aug-11	3	500	1015	2.5	0.0	∞	2	6.965	P. FAIL	500	1631	7.4	8.4	166.70	2	6.965	FAIL
1		3	500	1391	2.5	0.0	∞	2	6.965	P. FAIL	500	2298	7.4	8.4	235.18	2	6.965	FAIL
P-31	Mar-11	3	5	23.73	2.5	0.0	∞	2	6.965	P. FAIL	5	30.31	7.4	8.4	2.36	2	6.965	PASS
P-48	Mar-11	3	5	2.50	2.5	0.0	0	2	6,965	PASS	5	2.50	7,4	8.4	-0.50	2	6.965	PASS
		1 - 1	5	2.50	2.5	0.0	Ō	2	6.965	PASS	5	2.50	7.4	8.4	-0.50	2	6.965	PASS
	Aug-11	3	5	2.50	2.5	0.0	0	2	6.965	PASS	5	2.50	7.4	8.4	-0.50	2	6.965	PASS
	Nov-11	3	5	2.50	2.5	0.0	0	2	6.965	PASS	5	2.50	7.4	8.4	-0,50	2	6.965	PASS

Notes:

P. FAIL = Possible Fail

TABLE 12 STORMWATER BASIN - LOWER AQUIFER STATISTICAL COMPARISON (t-TEST) Note: D-1 is the Upgradient Well for the Stormwater Basin - Lower Aquifer

		Ĭ				1,2-Dich	loroethane							1,1-Di	chloroethane	*****		
Well			RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	n	(µg/L)	(μg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
D-2	Mar-11	3	250	1763	21111.3	8510.5	-1.97	2	6.965	PASS	250	3143	500.0	0.0	∞	2	6.965	P. FAIL
	May-11	3	250	1937.5	21111.3	8510.5	-1.95	2	6.965	PASS	250	3137	500.0	0.0	vo	2	6.965	P. FAIL
ļ	Aug-11	3	250	13518.0	21111.3	8510.5	-0.77	2	6.965	PASS	250	4772.5	500.0	0.0	∞	2	6.965	P. FAIL
	Nov-11	3	250	7981.0	21111.3	8510.5	-1.34	2	6.965	PASS	250	4436.5	500.0	0.0	∞	2	6.965	P. FAIL
D-15	Mar-11	3	500	581	21111.3	8510.5	-2.09	2	6.965	PASS	500	1213	500.0	0.0	8	2	6.965	P. FAIL
D-22	Mar-11	3	5	2.50	21111.3	8510.5	-2.15	2	6.965	PASS	5	2.50	500.0	0.0	a	2	6.965	PASS

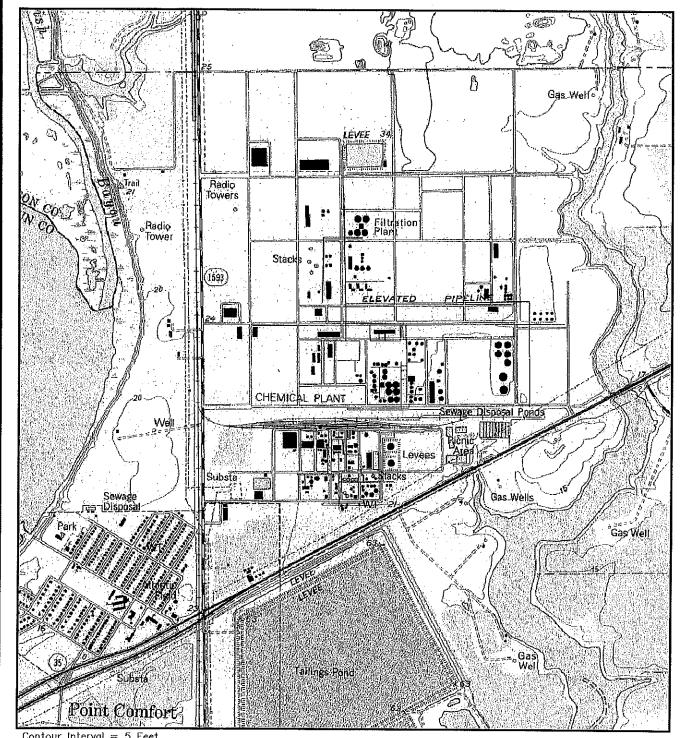
						1,1-Dich	loroethene					••••••••••	***************************************	Cł	loroform			
Well			RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	n	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
D-2	Mar-11	3	250	125	500.0	0.0	0	2	6.965	PASS	250	299	500.0	0.0	8	2	6.965	P. FAIL
	May-11	3	250	125	500.0	0.0	0	2	6.965	PASS	250	301.5	500.0	0.0	∞	2	6.965	P. FAIL
	Aug-11	3	250	125	500.0	0.0	0	2	6.965	PASS	250	3997	500.0	0.0	∞	2	6.965	P. FAIL
1	Nov-11	3	250	125	500.0	0.0	0	2	6.965	PASS	250	4328.5	500.0	0.0	∞	2	6.965	P. FAIL
D-15	Mar-11	3	500	250	500.0	0.0	0	2	6.965	PASS	500	1255	500.0	0.0	∞	2	6.965	P. FAIL
D-22	Mar-11	3	5	2.50	500.0	0.0	0	2	6.965	PASS	5	2.50	500.0	0.0	0	2	6.965	PASS

						Ве	nzene							Viny	/I Chloride			
Well			RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test	RL	Result	Combined	Combined	Calculated	D.O.F.	t-statistic	Test
Number	Date	n	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results	(µg/L)	(µg/L)	Mean	Std Dev	t-value	(n-1)	critical values	Results
D-2	Mar-11	3	250	275	500.0	0.0	∞	2	6.965	P. FAIL	250	1128	500.0	0.0	×	2	6.965	P. FAIL
	May-11	3	250	283	500.0	0.0	∞	2	6.965	P. FAIL	250	1197	500.0	0.0	∞	2	6.965	P. FAIL
	Aug-11	3	250	538	500.0	0.0	20	2	6.965	P. FAIL	250	1835.5	500.0	0.0	∞	2	6.965	P. FAIL
	Nov-11	3	250	565	500.0	0.0	∞	2	6.965	P. FAIL	250	1596	500.0	0.0	∞	2	6.965	P. FAIL
D-15	Mar-11	3	500	250	500.0	0.0	0	2	6.965	PASS	500	639	500.0	0.0	8	2	6.965	P. FAIL
D-22	Mar-11	3	5	2.50	500.0	0.0	0	2	6.965	PASS	5	2.50	500.0	0.0	0	2	6.965	PASS

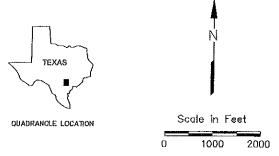
Notes:

P. FAIL = Possible Fail

FIGURES



Contour Interval = 5 Feet



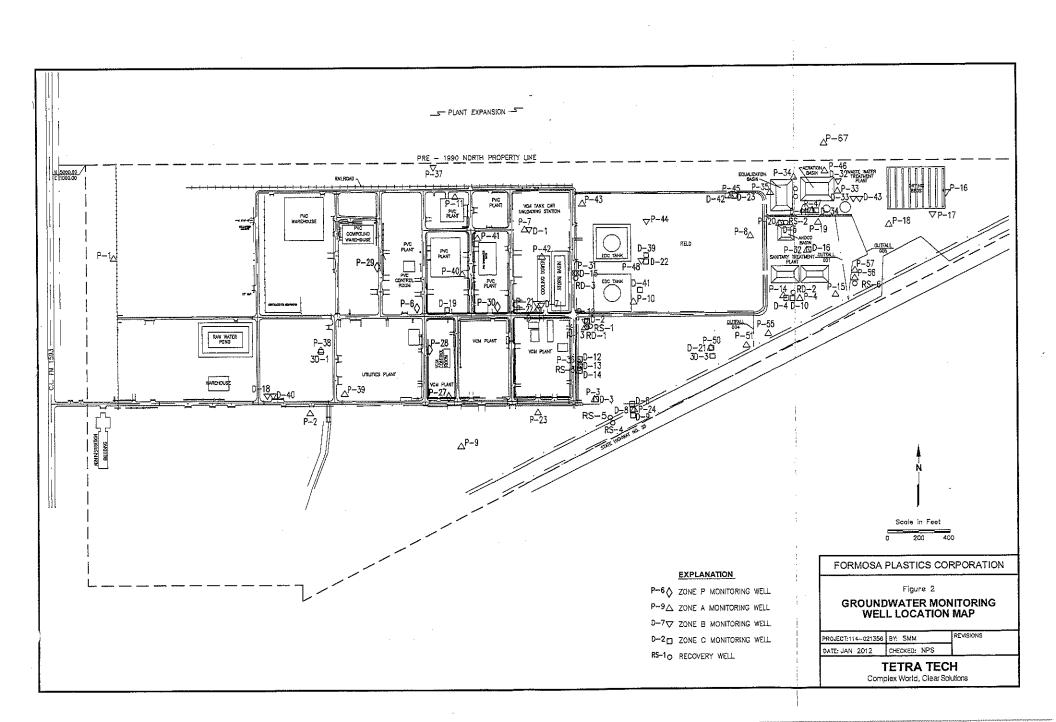
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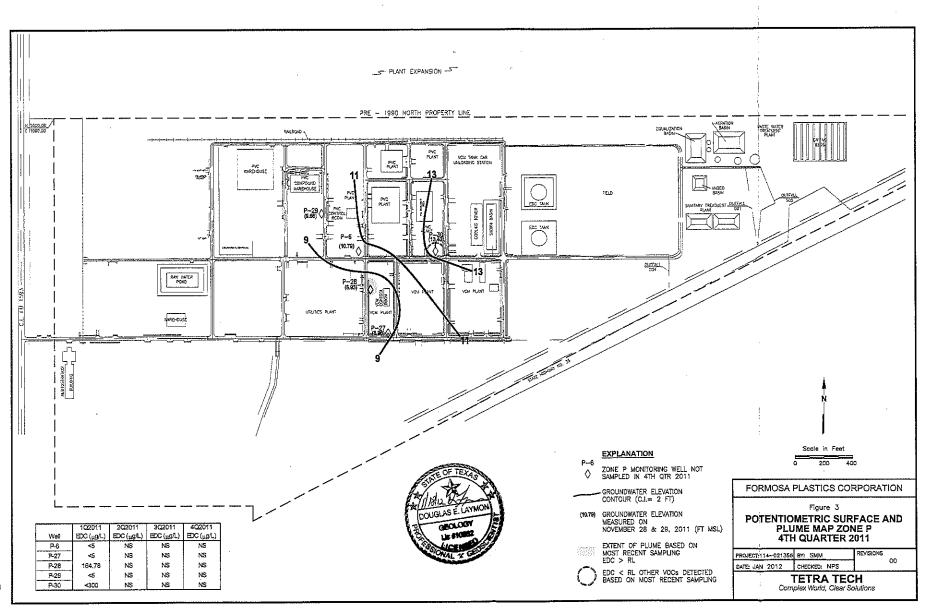
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Figure 1 SITE LOCATION MAP

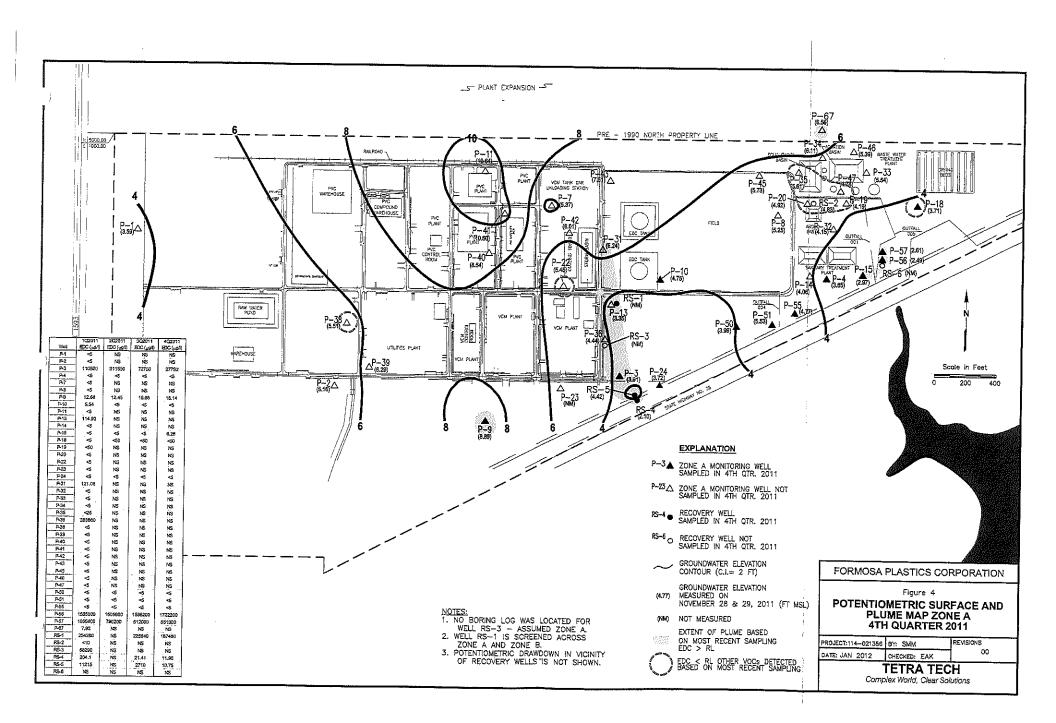
PROJECT: 021356	BY: SMM	REVISIONS
DATE: JAN 2012	CHECKED: NPS	

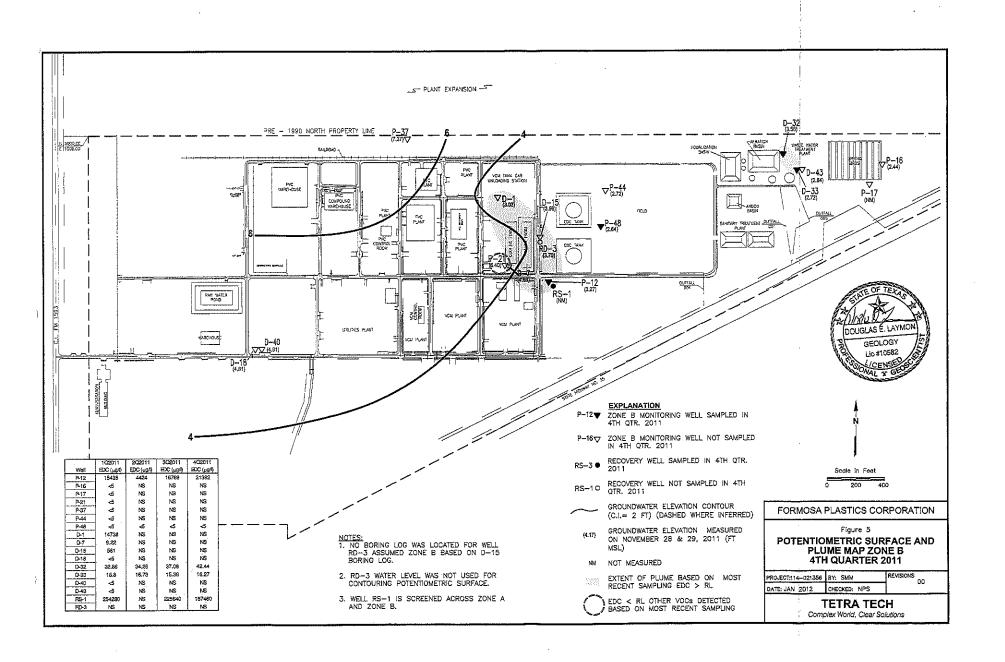
TETRA TECH Complex World. Clear Solutions

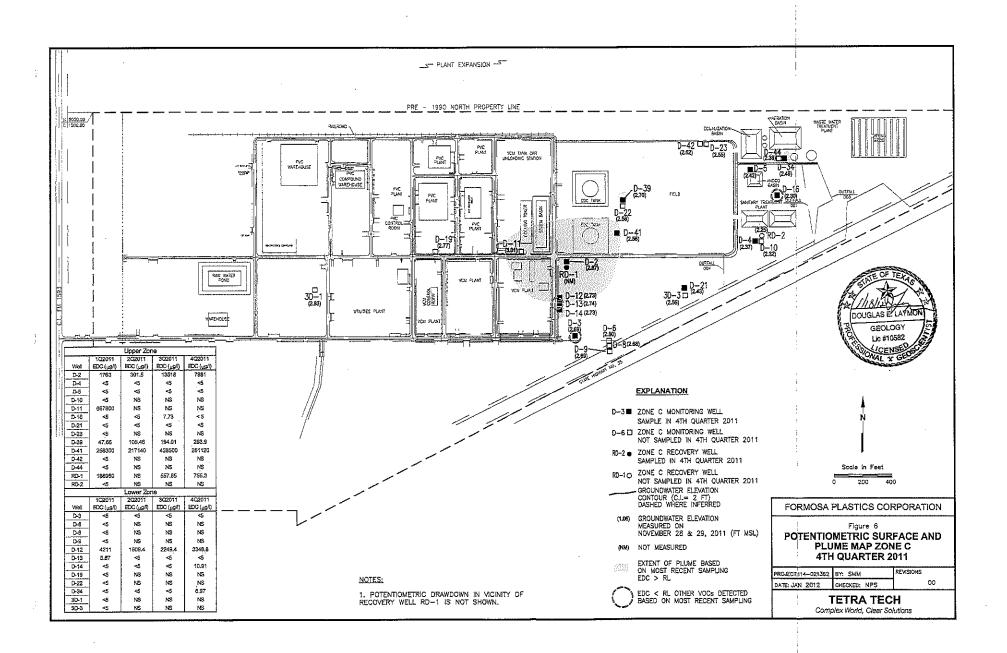




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APPENDIX A WATER LEVEL MONITORING RECORDS

WAT	ER L	EVEL M	ONITO	RING .	RECO	RD		DAT	E: 11/28	M	
Project N	o. 114-e	21356	Project Na	ame:	demosq	Plasti	حہ		PAGE		4
Weather	Conditio	ons:									
Measurin	ng Device	: Water line	Enulo38	Datum (I	MSL, NGV	/D, etc.):		· ·			
Observat											
Well ID	Time	Depth to Water (ft. BMP)	Depth to Product (ft. BMP)	MP Elevation (ft.)	WL Elevation (ft.)	Well Cap Present (y/n)	Well Plug Present (y/n)		Remarks	1	Measure By
p-33	1240	15,41									0
ρ-33 d-32 d-33	242	17,99									
d-33	1245	17.65									
d-43	1246	17,33									
P-16	1248	21-61									
P-16 P-17 P-18 P-56 P-57 P-19 d-44	1248	NA						Broker	well		
0-18	1251	17.02									
0-56	1257	14-98	·								7
0-57	1259	15.30									\neg
P-19	1303	14.77									7
	1305	18.14	- 10 - 111 - 11 - 1								7
d-34	1306	18.03									
p-47 d-5	1308								···		
d-5	1300	18.95							· · · · · · · · · · · · · · · · · · ·		
0-20	1312	16.00							·		
RS-2	1312	17.16									
0-35 d-23	1317	17.57									
<u>d-23</u>	1390	18.90						· <u>····································</u>			
2-45	1326	 									
0-45 d-42 0-8	1327	18.58							·		
p-8	1330	15.3									
3-48	1333	19.15						News.	T.p. col		
ا 22-ل		18.95									
1-39	1336	18.23								N	
leasured l	Ву:	Mu	lak	5			,	7800 Sh	a Tech, Inc. oal Creek Bl e 253 East	vd.	

Checked By:

Austin, TX 78757 (512) 338-1667 Fax (512) 338-1331

WAT	ER LI	EVEL M	ONITO			RD		DA	TE: M2 8/	In
Project N	lo.		Project Na	ame:	PC				PAGE 2	- of <u>4</u>
Weather	Condition	ns:								
Measurir	ng Device	1.4	<u></u>	Datum ()	MSL, NGV	/D, etc.):				
Observat	tions/Con	nments:								· · · · · · · · · · · · · · · · · · ·
								-		
Well ID	Time	Depth to Water (ft. BMP)	Depth to Product (ft. BMP)	MP Elevation (ft.)	WL Elevation (ft.)	Well Cap Present (y/n)	Well Plug Present (y/n)	-	Remarks	Measu: By
p-44	1339	20.97								10
p-43	1344	15.15								-++
p-34	1348	16.17								1
p-46	1361	16-22								11
0-32	1357	17.30								11
d-16	1358	18.10								11
p-28	1420	17.04							-	+-
·p-27	1424	13.20								11
2-39	1426	15.71								
اه-م	1430	18.08								
p-22	1431	17281		<u> </u>						
d-7	1433	18.70								
d-11	1435	20.37								11
2-15	1442	19-21								
	1444	18.96								
2/3	1446	19.11								
25-1	^	NA								
30-1		NA								
4-19	1500	20.35								
21-13	1502	20.10								7
1-14	1503	20.32								11
7-36	1504	18.01								11,
5-3	NA	M								11/
p-9	1508	13.93								W
easured F					R	F		00 Sh Suit	ra Tech, Inc. noal Creek Blv te 253 East n, TX 78757	d.

Checked By:

ndition Device: s/Com Time 5(1) 5(4) 5(4) 5(4) 5(3) 5(3)	Depth to Water (ft. BMP) 1875 18.62 19.80	Depth to Product (ft. BMP)	1	WL Elevation (ft.)	D, etc.): Well Cap Present (y/n)	Well Plug Present (y/n)		PAGE 3	Measur By	
Device: s/Com Time 5(1) 514 516 521	Depth to Water (ft. BMP) 1875 18.62 19.80	Product	MP Elevation	WL Elevation	Well Cap Present	Present		Remarks		
5/Com Time 5/1 5/4 5/6 521	Depth to Water (ft. BMP) 1875 18.62 19.80	Product	MP Elevation	WL Elevation	Well Cap Present	Present		Remarks		-
Time 511 514 516 521	Depth to Water (ft. BMP) 1875 18.62 19.80	Product	Elevation	Elevation	Present	Present		Remarks		
514 516 521 523	Water (ft. BMP) 1875 18.62 19.80	Product	Elevation	Elevation	Present	Present		Remarks		
514 516 521 523	Water (ft. BMP) 1875 18.62 19.80	Product	Elevation	Elevation	Present	Present		Remarks		
514 516 521 523	18.62 19.80									
516 521 523	18.62 19.80			1			Lock	is "coralized"	of	\leq
521 523	19.80		1		-	-		er geret		-
23	19.80	L								
									1	
₅ 27	18.30					-			1 /	
	18,22								1-	
529	17,84							···-	1	
33	17.83									
535							Tools	really from	11	
543	15.64						1)	1	
545	18,28								<u> </u>	
47	19.48		_							
550	18.30									
010	11.66							***	17	
14	13.08							-		\neg
017	17.95								11-	ᅦ
32	2.55									
30	13.90									
34	12.15							<u> </u>		
47	9.86									
250	18.39							-	 	\dashv
52							· · · · · · · · · · · · · · · · · · ·		 	\dashv
01	17.42									\exists
02	19.63									\dashv
9//							Tetr	a Tech, Inc.	<u> </u>	1
10	Lean	2			_ f	•	7800 SI	1 (** * * ****	đ	
5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	35 43 45 47 10 11 17 22 30 34 42 50 52	35 17.81 43 15.64 45 18.20 47 19.48 50 18.30 10 11.66 14 13.08 17 17.95 22 12.55 30 13.90 34 12.15 42 9.86 50 18.39 52 20.41 11.42	35 17.81 43 15.64 45 18.20 47 19.48 550 18.30 10 11.66 14 13.08 17 17.95 22 12.55 30 13.90 34 12.15 42 9.86 50 18.39 52 20.41 11 17.42	35 17.81 43 15.64 45 18.20 47 19.48 550 18.30 10 11.66 14 13.08 17 17.95 22 12.55 30 13.90 34 12.15 42 9.86 50 18.39 52 20.41 11 17.42	35 17.81 43 15.64 45 18.20 47 19.48 550 18.30 10 11.66 14 13.08 17 17.95 22 12.55 30 13.90 34 12.15 42 9.86 50 18.39 52 20.41 31 17.42	35 17.81 43 15.64 45 18.28 47 19.48 350 18.30 10 11.66 14 13.08 17 17.95 22 12.55 30 13.90 34 12.15 42 9.86 50 18.39 52 20.41 31 17.42	35 17.81 43 15.64 45 18.20 47 19.48 550 18.30 10 11.66 14 13.08 17 17.95 22 12.55 30 13.90 34 12.15 42 9.86 50 18.39 52 20.41 31 17.42 52 19.63	35 17.81 Token 13.64 14.5 18.36 19.48 10.166 11.66 11.66 11.66 11.65 12.08 17.19.5 17.95 18.30 18.30 18.30 18.30 18.30 18.30 18.30 18.30 18.42 18.39	35 17.81 43 15.64 45 18.28 47 19.48 550 18.30 10 11.66 14 12.08 17 17.95 22 22.55 30 13.90 34 21.5 42 9.86 50 18.37 52 20.41 11 17.42	35 17.81 43 15.64 45 18.28 47 19.48 350 18.30 10 11.66 14 13.08 17 17.95 22 12.55 30 13.90 34 12.15 42 9.86 50 18.39 52 20.41 11 17.42 52 19.63

Austin, TX 78757 (512) 338-1667 Fax (512) 338-1331

Checked By:

WATI	ER LE	EVEL M	ONITO	RING .	RECO	RD		DATE	17/29/11	
Project No	0.		Project Na	ame: F	PC					of _
Weather (Condition	ıs:								
Measurin	g Device:	;		Datum (l	MSL, NG	/D, etc.):				
Observati	ons/Con	nments:								
			-				· · · · · · · · · · · · · · · · · · ·			
Well ID	Time	Depth to Water (ft. BMP)	Depth to Product (ft. BMP)	MP Elevation (ft.)	WL Elevation (ft.)	Well Cap Present (y/n)	Well Plug Present (y/n)	R	lemarks	Measu By
918	7007	19,96						<u> </u>		CF
d-40	1709	19,92								1
p-2	1712	17.49								
J-41	1717	20.41								
p-10	1718	1736			,					
10-14	1720	14.48								
d-4	1722	16.38								
d-10	1723	16.21								
p-4	1725	14.16								
KD-2	1727	17.43								
p-15	151	13.10								
p-55	1737	17.24								
0-51	1742	16.30								
0-50	174he	18.40						·	 -	
71 ~ OI I	747	19.95								
31-3	1748	19.33								
2-67	1756	17.10								
0-37	1804	16.20							· · · · · · · · · · · · · · · · · · ·	
2-1	1839	22.45							· <u> </u>	
`										
		<u></u>								1
Measured 1	By:						7		Tech, Inc. oal Creek B	lvd
Checked B	<u>С</u>	M A				t	(512) 33	Suite Austin	253 East , TX 78757	

APPENDIX B GROUNDWATER SAMPLING RECORDS

GRO	UNDWAT	ER S	AMF	LINC	REC	CORD		PAGI	E of _	<u> </u>
Project N	Number: 114-0	21356	101.1	Project	Name:	FORMOSA	44h QTR 20		Date: 11	128/11
1	Number:		_	32			Starting Water		"):	17.99
Samplin	ng Location (we	etc.	.):	D	-32		Casing Stickup) (ft.):		
Sampled	d by: △RM	_/ T	E				Starting Water	Level (ft. BGL)):	
Measuri	ing Point (MP)	of Well:	T	0C/	/ PV		Total Depth (ft.	BGL):		
Screene	d Interval (ft. E	3GL):		-			Casing Diamet	er (In ID):		Z"
Filter Pa	ack Interval (ft.	, BGL):					Casing Volume	: (gal.):		
QUAL	JTY ASSU	RANC	E	. ,,,,,						
метно	ODS (describe)):								
Cleani	Cleaning Equipment: A CONOX F DISTILLED WATER RINSE									
Purgin	ng:	ERISTA	HITIC	Pum	φ	Sampling:		SAME		
Dispos	sal of Discharg	ged Water	r: <u>(</u>	DUSIT	E DR	UWLS	<u>,</u>			
INSTRU	MENTS (Indica	ite make	, mođel	, I.d.)						
Water	Level:	WATER		_		Thermometer:	Ho	RIBA UZZ		
рН Ме	eter: ±	ORIBA		217		Field Calibration	N: N	n BUFFER 4	,	
Condu	Conductivity Meter: NOPIBIA UZZXV Field Calibration: HOPIBIA HUTOCA 100-4									
	/ Filter Size:					Other: TURB	/D.O./ORP	HORIBA F	UTOCAL	
	PLING ME								· ·	
1307 Time	(gal. or L)	Purge (gal. of		Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	MG/L ()_() Re	m∨ emarks 08P
1312	10	0		24.4	7.00	12,300	CLEAR	41.2	1117	-87
1317	2.0	1		24.4	1,83	12,400	CLEAR	361	0.9	-51
1322	30			24,4	1.83	12,400	CEAR	33,9	0.7	-49
1327	40	1	,	24.4	6.84	12,400	CEAR	31.7	0.7	-50
1-6-1	(1)	1		/						
										
Water Le	evel (ft. BMP) a	t End of	Purge:	18	.06		Sample Intake	Depth (ft. BM)	P):	*
SAMP	LE INVEN									
	T	les Collec				Filtration	Preservation		Remarks	
Time	Volume	Compo	osition ((G, P)	No.	(Y / N)	(type)		ontrol samp	ole, other)
1329	40mL		<u> 6</u>	,	14	N	HCL	VOC		
										
			·							
ļ										
	į \	<u> </u>	ſ		L			The American		<u> </u>
Commen		TO RE	-place	· TUB	<u>KG.</u>			Tetra Tech 7800 Shoal Cr		
1UBL	JG REINFOUT	D FRE	N M	SELL		Tt		Suite 253		
							(510) 000	Austin, TX		
							(512) 338	3-1667 F	ax (512) 33	38-1331

Project Number: 114-02/356 101.1 Project Name: FORMOSA 4th QTR 2011 Date: 11/28/1	(
Sample Number: Not-33 Starting Water Level (ft. BMP): 17.0	05								
Sampling Location (well ID, etc.): D - 33 Casing Stickup (ft.):									
Sampled by: ARM / TE Starting Water Level (ft. BGL):									
Measuring Point (MP) of Well: Toc / PVC Total Depth (ft. BGL):									
Screened Interval (ft. BGL): Casing Diameter (In ID):									
Filter Pack Interval (ft. BGL): Casing Volume (gal.):									
QUALITY ASSURANCE									
METHODS (describe):									
Cleaning Equipment: AICONOX F DISTILLED WATER RINSE									
Purging: TERISTALTIC PUMP Sampling: SAME									
Disposal of Discharged Water: ONSTE DRUMS									
INSTRUMENTS (Indicate make, model, I.d.)									
Water Level: WATER WE 300 Thermometer: HORIBA UZZXD									
pH Meter: HORIBA 022 XV Field Calibration: ph BUFFER 401 £7.00	····								
Conductivity Meter: NORIBA UZZXV Field Calibration: HORIBA HUTGCA 100-4									
Filter / Filter Size: Other: TURB / D.O. / ORP HORIBA AUTOCA									
SAMPLING MEASUREMENTS									
Time (gal. or L) (gal. or L/m) (oC) pH (mmhos/cm) Color Turbidity (mo/L) Remarks	mV ORP								
1402 10 0,2 23.0 653 7,330 C/EAR 9,7 1.0 -	13								
1407 20 1 23.0 652 7,350 C/EAR 6.8 03 -	17								
1412 3.0 \$ 23.0 6.53 7.360 CEAR 6.6 0.2 -	19								
Water Level (ft. BMP) at End of Purge: 7.74 Sample Intake Depth (ft. BMP):									
SAMPLE INVENTORY Bottles Collected Filtration Preservation Remarks									
Bottles Collected Filtration Preservation Remarks Time Volume Composition (G, P) No. (Y / N) (type) (quality control sample, other	erl								
1414 40mL G 4 N HCL VOC	CI								
Comments: Tetra Tech, Inc.									
7800 Shoal Creek Blvd.									
Suite 253 East Austin, TX 78757									
(512) 338-1667 Fax (512) 338-133	1								

GRO	UNDWA	TER SAMF	LING I	RE	CORD		PAGE of			
Project	Number: 4_	021356 1011	Project Na	ıme:	FORMORA	4th DIE 2	2011	Date: 11/28/2011		
14	Number:	DUR-	1			Starting Water	Level (ft. BMP):	NA		
Samplir	ng Location (w	ell ID, etc.):	D-X	3	3	Casing Stickuj	o (ft.):	<u> </u>		
Sample	d by: ⊅P	M/TE				Starting Water	Level (ft. BGL):			
Measur	ing Point (MP)	of Well:	HH			Total Depth (ft	. BGL): _			
Screene	ed Interval (ft.	BGL):				Casing Diamet	er (In ID):			
Filter Pa	ack Interval (ft	. BGL):	. 4			Casing Volume	e (gal.):	V		
QUAI	JITY ASSU	JRANCE								
METH	ODS (describe):								
Clean	ing Equipmen	t:		1A		·				
Purgir	ng:				Sampling:		NA			
Dispo	sal of Dischar	ged Water:		\downarrow						
INSTRU	MENTS (Indic	ate make, model	, I.d.)							
Water	Level:	N	A		Thermometer:		NA			
рН Мо	eter:				Field Calibrati	on:	NA .			
Condi	activity Meter:			· ····	Field Calibrati	on:				
Filter	/ Filter Size:		·		Other:	Other:				
SAMI		asuremen								
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L /m)	Temp. (oC) 1	рΗ	Spec. Cond. (mmhos/cm)	Color	Turbidity	Domoule		
- Inite	(gan. or s)	(gair or 2 / iii)	1001		(initialities) ciril	Color	Turblatty	Remarks		
	Y N.	0-01-71	KEN,	Λ T	D-3	3-1				
	7, 47	Y C	NEC /U							
								· · · · · · · · · · · · · · · · · · ·		
Water La	evel (ft. BMP) a	t End of Purge:				Sample Intake	Depth (ft. BMP):			
	LE INVEN				!	.				
	Bott	les Collected			Filtration	Preservation	F	Remarks		
Time	Volume	Composition (lo.	(Y / N)	(type)		trol sample, other)		
	40 mL	G	L	+	N	HCL	YOC			
		<u> </u>								
		· · · · · · · · · · · · · · · · · · ·								
Commen	its:					,	Tetra Tech, I 7800 Shoal Cree			
	,						7800 Snoai Cree Suite 253 E	•		
····							Austin, TX 78	8757		
				1		(512) 338	-1667 Fax	(512) 338-1331		

GRO	UNDWA'	rer samf	PLIN	G RE	CORD	PAGE of					
Project	Number: [14-6	121356 101.1	Projec	t Name:	FORMOSA	4th QTR 20		Date: 11/28/11			
Sample	Number:	D	34			Starting Water		P): <u>[803</u>			
Samplin	ng Location (w	ell ID, etc.):	10-3	34		Casing Stickup	o (ft.):				
Sample	d by: △凡	M/TE				Starting Water	Level (ft. BGL):			
Measur	ing Point (MP)	of Well:	ŌC.	/PV	C	Total Depth (ft	. BGL):				
Screene	ed Interval (ft. :	BGL): —			_	Casing Diamet	er (In ID):	21			
Filter Pa	ack Interval (ft	.BGL):				Casing Volume	e (gal.):				
QUAI	JEZA YTL	JRANCE									
метн	ODS (describe):									
Clean	ing Equipmen	£;		A	CONOX = D	ISTILLED WA	TER RINSE				
Purgi	ng:t	ERISTALTIC	Pun	ΔP	Sampling:		SAME				
Dispo	sal of Dischar	ged Water: (DNSII	E DR	UWLS						
INSTRU	MENTS (Indic	ate make, model									
Water	Level:	WATERIN			Thermometer:	Ho		ZXV			
pH Me	eter:	ORIBA VZ	ZXX		Field Calibrati	10.1	. A	401 E 7.00			
Cond	Conductivity Meter: HORIBA UZZXV Field Calibration: HORIBA HUTGCAL 100-1										
i	Filter / Filter Size: Other: TURB (D.O. / ORP HORIBA AUTOCA)										
		ASUREMEN		, , , , , , , , , , , , , , , , , , , 			, · · · · · · · · · · · · · · · · · · ·				
1453 Time	(gal. ov L)	Purge Rate (gal. of L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV			
1458	10	0,2	239	9.78	6,650	CLEAR	399	0.8 -22			
1503	2.0		24.1	9,80	10,640	CEAR	311	07 -28			
1508	3,0	- ✓	24,0	9,79	6,660	CEAR	30.8	0.6 -30			
				ļ	,						
				<u> </u>							
			, <u>~</u>	<u> </u>							
		t End of Purge:	18	1/2		Sample Intake	Depth (ft. BM	P):			
SAMI	LE INVEN	les Collected	·								
Time	Volume	Composition ((G, P)	No.	Filtration (Y / N)	Preservation (type)	fouglity co	Remarks ontrol sample, other)			
1510	40mL	A		14	N	HCL	VOC	oraco outinpio, outini			
1010	11.21111-			 		110	Y D C	· · · · · · · · · · · · · · · · · · ·			
					· · · · · · · · · · · · · · · · · · ·						
	_										
Commer	its: RED INC	E TURKS.	TUBING	5			Tetra Tech				
NEEDS	3 REDIACIPO	7			Tt		7800 Shoal Cr Suite 253	East			
						(512) 338	Austin, TX -1667 F	78757 ax (512) 338-1331			
		 				(0,12) 000		a. (012) 000-1001			

GRO	UNDWAT	TER SAMF	LINC	RE	CORD		PAGI	E of		
Project I	Number: []4-0	21356 101.1	Project	Name:	FORMOSA	4th OTR 20	>//	Date: [1/2	28/11	
ii	Number:	P-18				Starting Water):	7,04	
Samplin	g Location (we	ell ID, etc.):	P~	18		Casing Stickup	o (ft.):			
Sampled	iby: ARW	1/TE				Starting Water	Level (ft. BGL)):		
Measuri	ng Point (MP)	of Well:	- OC /	7 PV	C	Total Depth (ft	. BGL):			
Screene	d Interval (ft. 1					Casing Diamet	er (In ID):		<u>z"</u>	
Filter Pa	ck Interval (ft.	BGL):				Casing Volume	e (gal.):			
QUAL	ITY ASSU	RANCE								
METH	ODS (describe)):								
Cleani	ing Equipment		Δ	Al	CONOX FD	ISTILLED WA	TER RINSE			
Purgir	Purging: TERISTALTIC PUMP Sampling: SAME									
Dispos	sal of Discharg	ged Water: (DUSTE	E DR	ums					
INSTRU	NSTRUMENTS (Indicate make, model, I.d.)									
Water	Water Level: WATER IN E 300 Thermometer: HORIGIA UZZ XV									
рН Ме	eter:	ORIBA UZZ	2 /2		Field Calibrati	on:	h BUFFER 4	TO1 27.0	6	
Condu	ictivity Meter:	HORIBA	Uza	<u> </u>	Field Calibrati	on:	DRIBA HUTC		-4	
Filter	Filter / Filter Size: Other: TURB / D.O. / ORP HORIBA AUTOCA									
SAMP	SAMPLING MEASUREMENTS									
1533 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L /m)	Temp.	рН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L ∫.O Rem	mV arks ORP	
1538	1,0	0.2	24.5	6.74	7,180	CLEAR	20,3	3.9	165	
1543	20		24.5	6.83	7,210	CLEAR	18.6	7.43	146	
1548	3,0	4	24,4	6.86	7,190	CLEAR	18.1	7.41	139	
					,		_			
		t End of Purge:	176	26_		Sample Intake	Depth (ft. BM)	P):		
SAMP	LE INVEN						T'			
Timo	Volume Bott	les Collected Composition	(C P)	No.	Filtration (Y / N)	Preservation	(quelity ec	Remarks ontrol sample	athaw)	
Time		Composition		4	(1 / 10)	(type) HCL	VDC	muoi sampie	e, other)	
<u> </u> 550	40mL	<u> </u>			<i>I</i> N	<u> </u>	VOC			
Commen	ts:		i				Tetra Tech	. Inc.		
							7800 Shoal Cr	eek Blvd.	İ	
	. 4						Suite 253 Austin, TX			
					(512) 338		78757 ax (512) 338	-1331		
(612) 666 1667										

GRO	UNDWA	TER SAMI	LINC	3 RE	CORD	•	PAG	E of	i <u> </u>		
Project :	Number: 4-6	121356 101.1	Project	. Name:	FORMOSA	4th OTR 20	>II:	Date:	11/28/11		
1	Number:		5			Starting Water		°):	1.8.98		
Samplin	ng Location (we	ell ID, etc.):	D	-5		Casing Stickup	o (ft.):				
Sample	d by: ARV	u/TE				Starting Water	Level (ft. BGL)): _			
Measur	ing Point (MP)	of Well:	ŌC /	1PV	2	Total Depth (ft	. BGL):				
Screene	d Interval (ft. 1	BGL): —				Casing Diamet	er (In ID):		2"		
Filter Pa	ack Interval (ft	. BGL): ~				Casing Volume	e (gal.):				
QUAI	ITY ASSU	JRANCE							***************************************		
METH	ODS (describe)):									
Clean	ing Equipmen		Λ	CONOX = D	DISTILLED WATER RINSE						
Purgir	ng:	ERISTALTIC	Pun	φ	Sampling:		SAME				
Dispo	sal of Dischar	ged Water:	DNSTE	E DR	UMS						
INSTRU	MENTS (Indica	ate make, model									
Water	Level:	WATERINE	3α)	Thermometer:	Ho		ZXD			
рН Ме	pH Meter: HORIBA UZZXX Field Calibration: Dh BUFFER 401 È 7.00										
Condu	activity Meter:	HORIBA	UZZ	, XZ	Field Calibrati	on:	ERIBA HUTE	ical lo	20-4		
I	Filter / Filter Size: Other: TURB / D.O. / ORP HORBA AUTOCA										
SAMI		ASUREMEN									
1617 Time	Cum. Vol. (gal. or 1)	Purge Rate (gal. of L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	MG/L D.O. F	m∨ Remarks ORP		
1622	1.0	0,2	23,9	6.81	6,220	CLEAR	366	0,8	-/85		
1627	2,0	4	24.0	6.82	6,230	CLEAR	18.7	0,6	<i>→20</i> 2		
1632	3.0	V	24.0	6.83	6,230	CLEAR	18,6	06	-20g		
							· 	(
	,						*****				
		t End of Purge:	19	D2_		Sample Intake	Depth (ft. BM)	P):	*		
SAMP	LE INVEN						····				
Time	Volume	les Collected Composition ((C P)	No.	Filtration (Y / N)	Preservation	(ausolitza oc	Remarks			
		2	ω, τ)	4	N	(type)		nitioi san	iple, other)		
1634	40mL	<u> </u>		T	IN	ncl	<u>VOC</u>				
Commen	ite:						Tetra Tech	Inc			
COMMICH		·	 .			7	7800 Shoal Cr		İ		
	<u> </u>						Suite 253				
						(512) 338	Austin, TX -1667 Fa	78757 ax (512) 3	38-1331		
				<u> </u>		(012) 000	re	~~ (O 1 G) U	00-1001		

GROU	JNDWA	TER SAMP	LINC	RE	CORD		PAG:	E of(
Project N	umber: 4-0	21356 101.1	Project	Name:	FORMOSA	4th QTR 20	>(1	Date: 11/28/	1/		
Sample N		D- (<i>و</i> ا			Starting Water): 18,6	902		
Sampling	g Location (we	ell ID, etc.):	D-	16		Casing Stickup	o (ft.):				
Sampled	by: ARM	1/TE				Starting Water	Level (ft. BGL):			
Measurin	ıg Point (MP)	of Well:	<u> </u>	/ PV	<u> </u>	Total Depth (ft.	. BGL):				
Screened	Interval (ft. 1	BGL):	<u> </u>		mana*	Casing Diamet	er (In ID):	2"			
Filter Pac	k Interval (ft	. BGL):			1	Casing Volume	e (gal.):				
QUAL	ITY ASSU	JRANCE									
метно	DS (describe)):									
Cleanir	ng Equipmen	t ;	Λ	Al	CONOX FD	ISTILLED WA					
Purging	g:	ERISTALTIC	Pum	ρ	Sampling:		SAME				
Disposa	al of Discharg	ged Water: (DHSTE	E DR	UWLS						
INSTRUM	IENTS (Indica	ate make, model									
Water I	Level:	, WATER	INE 3	3 <u>00 </u>	Thermometer:	_kk-		2XD			
pH Met	er:	LORIBA UZ	ZXY		Field Calibrati	377	N BUFFER L	tol = 7.00			
Conduc	Conductivity Meter: HORIBA UZZXO Field Calibration: HORIBA HUTOCA 100-4										
	Filter Size:	*	-		Other: TURB	/DO:/ORP	HORIBA L	UTOCA			
		asuremen		-		-					
Time	(gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	ДĦ	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L),() Remarks	mV nPP		
1656	1.0	0.2	22.9	6.90	6.720	CLEAR	19.5	1	90		
1701	2.0		23.0	6,90	6,730	CLEAR	18.1	D.3 -	90		
17.06	3.0	1	22.9	690	6.730	CLEAR	17.7		89		
1000		f	77(1)	000			87.				
											
Water Lev	vel (ft. BMP) a	t End of Purge:	16	3,27		Sample Intake	Depth (ft. BM	P):			
SAMPI	E INVEN										
		les Collected			Filtration	Preservation		Remarks			
Time	Volume	Composition	G, P)	No.	(Y / N)	(type)		ontrol sample, oth	ier)		
1708	40mL	6		4	N	HCL	VOC				
											
Comment	s:					,	Tetra Tech 7800 Shoal Cr				
					Tt		Suite 253		j		
							Austin, TX	78757			
						(512) 338	-1667 F	ax (512) 338-133	1		

GRO	UNDWA?	TER SAMF	LINC	RE	CORD		PAGE of		
Project l	Number: 114-	021356 101.1	Project	Name:	FORMORA	4th QUE	2011	Date: 11/28/11	
	Number:	FB-01				1	Level (ft. BMP)		
Samplin	g Location (w		EB-0)		Casing Sticku	p (ft.):	<u> </u>	
Sample	iby: ARW	VI TE				Starting Water Level (ft. BGL):			
Measuri	ng Point (MP)	of Well:	Н	A		Total Depth (ft	. BGL):		
Screene	d Interval (ft. 1	BGL):				Casing Diame	ter (In ID):		
Filter Pa	ick Interval (ft	. BGL):	A			Casing Volum	e (gal.);	V	
QUAL	ITY ASSU	JRANCE							
METH	ODS (describe):		·					
Cleani	ng Equipmen	t:		NA					
Purgin	ng:				Sampling:		NA_		
Dispos	sal of Dischar	ged Water:		\vee					
INSTRU	MENTS (Indic	ate make, model	.,,						
Water	Level:	<u> </u>	H		Thermometer:		NA_		
рН Ме	eter:				Field Calibrati	on:			
Condu	ctivity Meter:				Field Calibrati	on:			
Filter	/ Filter Size:	V			Other:				
SAMP		asuremen							
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L /m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	Remarks	
	, , , , , , , , , , , , , , , , , , ,		(, ,	F	(233223)	33.01	Tarbiany	Remarks	
	**								
	* i	IELD BLAN	112	FR-	OI) TAKE	N VIEXT.	TO DOT	6-*	
				1. (-)	OUT /PINZ	NNEX	10 1		
Water Le	vel (ft. BMP) a	at End of Purge:				Sample Intake	Depth (ft. BMF):	
SAMP	LE INVEN	ITORY							
		les Collected			Filtration	Preservation		Remarks	
Time	Volume	Composition (G, P)	No.	(Y / N)	(type)		ntrol sample, other)	
1720	40 ml	<u> </u>		4	N	HCL	XOC		
				Mar-					
								-	
Commen	ts:						Tetra Tech, 7800 Shoal Cre		
					TE		Suite 253 I	East	
						(K10) 200	Austin, TX 7	1	
						(512) 338	-100/ Fa	x (512) 338-1331	

GRO	UNDWA	TER SAMP	LIN	3 RE	CORD		PAG	E of
Project 1	Number: 114-6	121356 101.1	Project	: Name:	FORMOSA	4th OTR 20)[[Date: 11/28/11
	Number:	P- (Starting Water		
Samplir	ng Location (w		P-6	57		Casing Stickup	o (ft.):	
Sample	d by: ΔRy	1/TE	,			Starting Water	Level (ft. BGL):
Measuri	ing Point (MP)	of Well:	ŌC. ,	1 PV	C	Total Depth (ft	. BGL):	
Screene	d Interval (ft.]					Casing Diamet	er (In ID):	6"
Filter Pa	ick Interval (ft	. BGL):			•	Casing Volume	e (gal.):	
QUAL	ITY ASSU	JRANCE						
METH	ODS (describe):				······································		
Clean	ing Equipmen	t;	^	Al	CONOX = D	ISTILLED WA	TER RINSE	
Purgir	rg:t	ERISTALTIC	Pun	φ	Sampling:		SAME	
Dispos	sal of Dischar	ged Water: (DNSTE	E DR	UMS			
INSTRU	MENTS (Indica	ate make, model	, I.d.)					
Water	Level:	, WATER IN	ie 3c	Ö	Thermometer:	Ho	PIBA UZZ	XV
рН Ме	eter:	ORIBA UZ	<u>2 </u>		Field Calibrati	on:	A BUFFER L	hol = 7.00
Condu	ictivity Meter:	HORIBA	UZZ	<u> </u>	Field Calibrati	oņ:	ERIBA AUTO	ical 100-4
Filter	/ Filter Size:	,—,, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>			Other: Turk	100/ORP	HORIBA F	UTOCAL
SAMP		ASUREMEN						
1730 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L m√ D.O. Remarks ORP
1735	1,0	0,2	24.0	5.94	16,200	CLEAR	4.1	0.8 -101
1740	2.0		24,2	5.96	16,200	CLEAR	4.3	0.6 -114
1745	3,0	4	24.3	5.98	16,200	CLEAR	39	0.6 -111
		`			, ,			
		t End of Purge:	<i>15.</i>	35		Sample Intake	Depth (ft. BM)	P):
SAMP	LE INVEN							
Time	Volume	les Collected Composition (G P)	No.	Filtration (Y / N)	Preservation	(anality as	Remarks
	40mL	G Composition (α, 1)	Ц	N	(type) HCL		ontrol sample, other)
1747	-9UML			7	14	ncl	VOC	
Commen	ts:			_			Tetra Tech	. Inc.
~~~~~			,,			7	7800 Shoal Cr	eek Blvd.
					It		Suite 253	
						(512) 338	Austin, TX -1667 Fa	78757 ax (512) 338-1331
						(= 12, 500		(312) 333 1331

GRO	UNDWA'	TER SAMI	PLIN	G RE	CORD		PAG	E of		
Project	Number:   4-(	021356 101.1	Project	t Name:	FORMOSA	4th OTR 20	>//	Date: 11	29/2011	
1	Number:		56			Starting Water			14.98	
Samplii	ng Location (w	ell ID, etc.):	P-	-5le		Casing Stickup	o (ft.):			
Sample	d by: ΔRM	/ TE				Starting Water	Level (ft. BGL	):		
Measur	ing Point (MP)	of Well:	OC.	/PV	C	Total Depth (ft	. BGL):			
Screene	ed Interval (ft.	BGL): —				Casing Diamet	er (In ID):		Z"	
Filter Pa	ack Interval (ft	. BGL): -				Casing Volume	e (gal.):			
QUAI	JTY ASSU	JRANCE								
метн	ODS (describe	):								
Clean	ing Equipmen	<b>t</b> ;	Δ	A]	CONOX = D	ISTILLED WA	TER RINSE			
Purgi	ng: <u> </u>	ERISTALTIC	Pon	<b>Q</b>	Sampling:		SAME			
Dispo	sal of Dischar	ged Water: (	DHSTI	E DR	UWG					
INSTRU	MENTS (Indic	ate make, mode	l, I.d.)					-		
Water	Level:	USTER IN	E 300	>	Thermometer:	Ac	PIBA UZ	Z XZ		
рН Мо	eter:	ORIBA UZ	<u>Z XP</u>		Field Calibrati	on:	A BUFFER L'	1.01 È 7.	00	
Condi	Conductivity Meter: HORIBA VZZXV Field Calibration: HORIBA HUTGCA 100-4									
Filter	/ Filter Size:	· <u> </u>	<del></del>		Other: Turk	100/ORP	HORIBA F	UTOCAL		
SAMI		ASUREME								
0747 Time	(gal. or L)	Purge Rate (gal. of L/m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	MG/L	m∨ emarks ORP	
0752	1.0	0.2	23,7	6,04	17,600	CLEAR	5,5	0,5	-120	
0757	2.0	(	243	6117	16,200	CLEAR	4.3	06	~/22	
0802	3.0	4	24.4	6,20	16,000	CLEAR	4.1	0.6	-126	
			,							
				<u> </u>						
		it End of Purge:	15	.15		Sample Intake	Depth (ft. BM	P):	_	
SAMP	LE INVEN									
Time	Bott Volume	les Collected Composition	(C. D)	No.	Filtration (Y / N)	Preservation	(0.44 m 124m - 4.4	Remarks	3 13 3	
		G	(0,1)	Ц	(1 / 10)	(type)		ontrol sam	pie, other)	
0804	40mL					HCL_	VOC			
			<u></u>							
							<del></del> _			
		<del></del>								
Commen	ıts•	<del>-</del>					Tetra Tech	Inc		
COMMITTEE						7	7800 Shoal Cr			
					Tt		Suite 253			
		A. 400 ARABA				(512) 338	Austin, TX -1667 F	78757 ax (512) 33	}8-1331	
						()		_ ( _ ( ) _ ( )		

GRO	UNDWA	TER SAMI	PLINC	FRE	CORD		PAG	E of		
Project l	Number:   4-4	121356 101.1	Project	Name:	FORMOSA	4th QTR 20	>11	Date:	11/29/2011	
	Number:	P-				Starting Water			13,13	
Samplin	ng Location (w	ell ID, etc.):	P-	15		Casing Stickup	o (ft.):		<u> </u>	
Sample	iby: ARV	4/TE				Starting Water	Level (ft. BGI	.):		
Measuri	ing Point (MP)	of Well:	OC /	/ PV	<u>C</u>	Total Depth (ft	. BGL):			
Screene	d Interval (ft. 1	BGL):		· •		Casing Diamet	er (In ID):		24	
Filter Pa	ick Interval (ft	. BGL): -				Casing Volume	e (gal.):			
QUAL	JTY ASSU	JRANCE								
METH	ODS (describe	):								
Cleani	ing Equipmen	<b>t</b> ;	Λ <u></u>	Al	CONOX FD	ISTILLED WA		<u> </u>		
Purgir	ıg:	ERISTALTIC	- Pum	φ	Sampling:		SAME			
Dispos	sal of Dischar	ged Water: (	DUSTE	E DR	OMS					
INSTRU	MENTS (Indic	ate make, model	, I.d.)				· · · · · · · · · · · · · · · · · · ·			
Water	Level:	WATERINE			Thermometer:	, kle	RIBA UZZ			
рН Ме	eter:	ORIBA UZ	2 XT		Field Calibrati	ion:	n BUFFER 4	OLE 7	00	
Condu	Conductivity Meter: HORIBA UZZXV Field Calibration: HORIBA HUTGCA 100-4									
	/ Filter Size:		_		Other: Tues	100.10RP	HORIBA !	UTOCAL		
		ASUREMEN								
0828 Ime	Cum. Vol. (gal. of L)	Purge Rate (gal. of L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	MG/L	m∨ Remarks 080	
0833	1.0	0,2	24.9	654	18,300	CLEAR	2.0	100	lo	
0838	2.0	İ	25,4	657	18,300	CLEAR	1.8	0,9	8	
0843	3.0	4	25.7	6.60	18,100	CLEAR	1.7	1.0	8	
,										
					·	, in the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second				
		t End of Purge:	13.	20		Sample Intake	Depth (ft. BM	P): -		
<u>SAMP</u>	LE INVEN									
Time	Volume	les Collected Composition (	G P)	No.	Filtration (Y / N)	Preservation	(anality o	Remarks		
		Z Composition (	(u, 1)	Ц	N	(type)		ontroi san	ple, other)	
0845	40mL	<u> </u>			IN .	<u>ncl</u>	VOC		··· <u> </u>	
							····		<del></del>	
		• •								
		<u> </u>								
Commen	ts:			-			Tetra Tech	. Inc.		
						7	7800 Shoal Cr	eek Blvd.		
					Tt		Suite 253 Austin, TX			
						(512) 338		78757 ax (512) 3	38-1331	

GRO	UNDWA'	TER SAMI	PLIN	G RE	CORD		PAG	E	of
Project	Number: <u> </u>  4-(	021356 1011	Projec	t Name:	FORMOSA	4th QTR 20	>11	Date:	11/29/2011
II.	Number:		PI	-{		Starting Water			14.15
Samplin	ng Location (w	ell ID, etc.):	P-	- 4		Casing Stickup	o (ft.):		
Sample	d by: ARM	/TE				Starting Water	Level (ft. BGL	<b>.</b> ):	
Measur	ing Point (MP)	of Well:	ŌC.	/PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft.		,			Casing Diamet			5,,
Filter Pa	ick Interval (ft	. BGL): -			>	Casing Volume			
QUAI	ITY ASSU	JRANCE							
METH	ODS (describe	):						•	
Clean	ing Equipmen	ŧ;	Δ	A]	CONOX = D	ISTILLED WA		-	· · · · · · · · · · · · · · · · · · ·
Purgir	ıg:	ERISTALTIC	Pun	vQ	Sampling:		SAME		
Dispo	sal of Dischar	ged Water:	DHSTI	E DR	UMS.				
INSTRU	MENTS (Indic	ate make, mode	_						
Water	Level:	WATERING	<u> 50</u>	<u>ರ</u>	Thermometer:	H	RIBA UZ	ZXD	
рН Ме	eter:	ORIBA UZ	$ZX\nabla$	<del>-</del>	Field Calibrati	ion:	n Buffer		•
Condi	activity Meter:	HORIBA	UZZ	<u> </u>	Field Calibrati	on:	ORIBA AUTO	SCAL 1	00-4
Filter	/ Filter Size:	· <u> </u>			Other: TURB	/DO/ORP	HORIBA K	UTOCA	1
	LING ME	ASUREMEI							-
0905 Time	(gal. or L)	Purge Rate (gal. of L/m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L	m∨ Remarks ORP
0900	1.0	0,2	23.8	6.65	16,300	CLEAR	2,9	0.7	91
0915	2.0		24,0	6109	13,900	CEAR	3.1	0.7	110
0920	3.0	4	24.1	671	13,1,000	CLEAR	3,2	6.7	117
		,							
	<i>'</i>								
				İ					
		t End of Purge:	14.	53		Sample Intake	Depth (ft. BM)	P): —	
SAMP	LE INVEN								
Time	Volume	les Collected Composition (	(C D)	No.	Filtration (Y / N)	Preservation	(1: <del> </del>	Remark	
0922		Composition	O, I)	14	N	(type)		ontroi sa	mple, other)
0-(22	40mL	<u> </u>		_7	<u> </u>	HCL	VOC	<del></del>	
		· · · · · ·							
Commen	ts:						Tetra Tech	Inc	
	<del></del>				[ <b></b>	7	800 Shoal Cr		1.
							Suite 253		
	·		~			(512) 338-	Austin, TX -1667 Fa		338-1331
								- ()	200 1001

GRO	UNDWA'	TER SAMI	PLIN	3 RE	CORD		PAG	E of)		
Project	Number: //4-(	021356 101.1	Project	Name:	FORMOSA	4th QTR 20	>// >//	Date: (1/29/201)		
¥ —	Number:	D-	-4		_	Starting Water				
Samplin	ng Location (w	ell ID, etc.):	D-	4		Casing Stickup (ft.):				
Sample	d by: DRW	/ TE				Starting Water Level (ft. BGL):				
Measur	ing Point (MP)	of Well:	OC_	1PV	C	Total Depth (ft	. BGL):			
Screene	d Interval (ft. :	BGL): —				Casing Diameter (In ID):				
-	ack Interval (ft					Casing Volume (gal.):				
QUAI	JTY ASSU	JRANCE								
METH	ODS (describe	):								
Clean	ing Equipmen	ŧ.;	Λ	Al	CONOX = D	ISTILLED WA	JER RINSE			
Purgir	ng:	ERISTAITIC	Pun	φ	Sampling:		SAME			
Dispo	sal of Dischar	ged Water:	DNSIT	E DR	DMS					
INSTRU	MENTS (Indic	ate make, mode	l, I.d.)							
Water	Level:	, WATER!		3D	Thermometer:	_ktc	PIBA UZ	ZXD		
рН Ме	eter:	il	2 <u>X</u> V		Field Calibrati	117	- A	1.01 £ 7.00		
Condu	activity Meter:	HORIBA	UZ	<u> </u>	Field Calibrati	on:	ORIBA HUTE			
	/ Filter Size:				Other: Turk	100/ORP	HORIBA	UTOCA		
	Cum. Vol.	ASUREMEN		<del>r</del>	L Spee Cond					
0952 Time	(gal. or 1)	Purge Rate (gal. of L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV D.O, Remarks ORP		
0957	1.0	0,2	23.3	6.88	7,950	CLEAR	31,0	06 -156		
1007	2.0		23,4	6.89	7,950	CLEAR	26.7	0.5 -169		
1007	3,0	~	23.3	6.90	7,960	CLEAR	25.9	0.5 - 175		
:										
		t End of Purge:	16	48		Sample Intake Depth (ft. BMP):				
SAIVIP	LE INVEN	les Collected			TVI		····			
Time	Volume	Composition	(G, P)	No.	Filtration (Y / N)	Preservation (type)	Remarks (quality control sample, other)			
1009	40mL	A		Ц	N	HCL	VOC			
1001		<del></del>				1102	100			
Commen	ts:						Tetra Tech	, Inc.		
						7	7800 Shoal Cr	'		
					Tt	Suite 253 East Austin, TX 78757				
					<u> </u>	(512) 338-1667 Fax (512) 338-1331				

GRO	UNDWA:	TER SAMI	PLIN	G RE	CORD		PAG	E of		
Project	Number: //4-(	021356 101.1	Project	t Name:	FORMOSA	4th QTR 20	>11	Date: 11 2	29/2011	
Sample	Number:	P-	- 14			Starting Water			14,50	
Samplir	ng Location (w	ell ID, etc.):	P-	- 14		Casing Stickup (ft.):				
Sampled by: ARM / TE						Starting Water Level (ft. BGL):				
Measur	ing Point (MP)	of Well:	TOC.	/PV	C	Total Depth (ft. BGL):				
Screene	d Interval (ft.	BGL): —				Casing Diameter (In ID):				
Filter Pa	ack Interval (ft	. BGL):				Casing Volume				
QUAI	ITY ASSU	JRANCE				<del></del>				
METH	ODS (describe	e):								
Clean	ing Equipmen	 t;	Δ=-	Al	CONOX = D	ISTILLED WA	TER RINSE			
Purgir	ıg:	ERISTALTIC	Pun	Φ	Sampling:	<u> </u>	SAME			
Dispos	sal of Dischar	ged Water:	DUST	E DR	UMS					
INSTRU	MENTS (Indic	ate make, mode								
Water	Level:	DATER INE	300	<b>5</b>	Thermometer:	_Hz	PIBA UZZ	, XD		
рН Ме	eter:	ORIBA UZ	2 XV		Field Calibrati	on:	A BUFFER H	101 } 7.0i	٥	
Condu	activity Meter:	HORIBA	UZZ	2X7	Field Calibrati	on:	ERIBA AUTO	SCA		
Filter	/ Filter Size:	<del>-</del>			Other: TURB	/DO. /ORP	HORIBA K	UTOCAL		
		ASUREME	VTS		_			10,1000		
1030 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L /m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L	m∨ arks ORP	
1035	0	0.2	24.0	10108	11,100	CLEAR	2.4	0.8	_ /	
1040	2.0		24.0	6.73	10,200	CLEAR	2.2	0.7	<u> </u>	
1045	3.0	4	24.1	6.74	10,000	CLEAR	23	0.6	-20	
		,								
_										
									···	
		t End of Purge:	15.	60	Sample Intake Depth (ft. BMP):					
SAMP	LE INVEN									
75:		les Collected	C DI	NT.	Filtration	Preservation		Remarks		
Time	Volume	Composition (	G, P)	No.	(Y / N)	(type)	(quality control sample, other)			
1047	7 40mL G 4			N	HCL HCL	Voc	·····			
			-							
								<del></del>		
lommon	ter						Materia Maria	*		
Commen	ເວ.					7	Tetra Tech '800 Shoal Cr			
						Suite 253 East				
			•		[ -~]	(E10) 000	Austin, TX		1001	
						(512) 338-	1667 Fa	ex (512) 338-	1331	

GRO	UNDWA'	TER SAMI	PLIN	G RE	CORD		PAG	E of	
Project 1	Number:   4-6	021356 101.1	Projec	t Name:	FORMOSA	4+h QTR 20	>//	Date: 1/ [,	29/2011
<b>!</b>	Number:	P-5				Starting Water			17,25
Samplin	g Location (w	ell ID, etc.):	P	55		Casing Stickup (ft.):			
Sample	iby: ARM	N/TE				Starting Water Level (ft. BGL):			
Measuri	ng Point (MP)	of Well:	OC	/PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft. 1	BGL): —				Casing Diamei	er (In ID):		24
Filter Pa	ck Interval (ft	. BGL):				Casing Volume	e (gal.):		
QUAL	ITY ASSU	JRANCE							
METHO	DDS (describe	):						· · · · · · · · · · · · · · · · · · ·	
Cleani	ng Equipmen	<del></del>		Al	CONOX = D	ISTILLED WA	TER RINSE		
Purgir	ıg:	ERISTALTIC	Pun	<u> </u>	Sampling:		SAME		
Dispos	sal of Dischar	ged Water:	DHSII	E DR	UWS				
INSTRU	MENTS (Indica	ate make, mode							
Water	Level:	WATERINE	<u> 3</u> 0	<u> </u>	Thermometer:	H	RIBA UZZ	2 XD	
рН Ме	ter:	ORIBA UZ	<u> 2                                   </u>		Field Calibrati	on:	N BUFFER U	FOL & 7.0	00
Condu	ctivity Meter:	HORIBA	<u>U22</u>	ZXZ	Field Calibrati	oņ:	DRIBA AUTO	<u>scal 100-</u>	4
Filter ,	/ Filter Size:				Other: Turk	100. /ORP	HORIBA !	JUTOCAL	
		asuremei							
III3 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L ),(), Rem	m∨ arks ORP
1118	10	0,2	25,7	7.16	2,130	CLEAR	6,0	11.7	~  Z3
123	2.0		2517	7,23	1,790	CLEAR	53	16	-119
1128	3.0		25.8	7.06	1,600	CLEAR	4,8	1.5	-89
1133	4.0	4	25,8	7,02	1,580	CLEAP	4.4	16	-79
-4:					,			· ·	
					THE				
		t End of Purge:	17	50	Sample Intake Depth (ft. BMP):				
SAMP.	LE INVEN							<b>9</b> ),	
Time	Volume	les Collected Composition (	G Pl	No.	Filtration	Preservation	Remarks		
	40mL	Composition (G, P)		ц.	(Y / N) (type)		(quality control sample, other)		
1135	$\neg \cup m \vdash$				IN	HCL	VOC	<del></del>	
								<u> </u>	
<del></del>								<u> </u>	
		· · · · · · · · · · · · · · · · · · ·					<del></del>		
comment	's:					<u> </u>	Tetra Tech	Inc	
						Tetra Tech, Inc. 7800 Shoal Creek Blvd.			
	<u></u>						Suite 253		
						(512) 338-	Austin, TX	78757 ax (512) 338-	1221
			<del></del>			(012) 000	1001 Pi	an (012) 000-	1001

GRC	)UNDWA	TER SAMF	PLING	RE	CORD		PAGE of		
Project	Number:   4_	-021356 101.1	Project	Name:	FORMOBA	4th DUE 2	2011	Date: 11/29/2011	
II	e Number:	D(10) -					r Level (ft. BMP):		
Sampli	ing Location (w	11	P-5!	5_		Casing Stickup			
Sample	ed by: ДРМ	ITE				Starting Water	r Level (ft. BGL):		
Measur	ring Point (MP)	of Well:	NF	A		Total Depth (ft			
Screene	ed Interval (ft.	BGL):				Casing Diamet	ter (In ID):		
	ack Interval (ft		4			Casing Volume	e (gal.);	<u>\</u>	
<u> </u>	LITY ASSU								
METH	IODS (describe	<del>2</del> ):							
Clean	ning Equipmen	ıt:		NA.			A		
Purgii	_				_ Sampling:		NA.		
	osal of Dischar	· <del></del>					2		
		cate make, model	i, I.d.)						
	r Level:	N _.	<u>H</u>		_ Thermometer:		NA		
рН Ме					_ Field Calibrati	<del></del>			
ł	uctivity Meter:				Field Calibration	ion:			
<u> </u>	/ Filter Size:		<u>!</u>		Other:	<del> </del>	<u> </u>		
SAM	PLING ME.	ASUREMEN Purge Rate			Loss Cond	<del>,</del>			
Time	(gal. or L)	(gal. or L /m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	Remarks	
	+			<del></del>				***************************************	
				;					
							1		
	-X Dor	0-02 TA	KEN	AT	P-55	1			
		at End of Purge:				Sample Intake	Depth (ft. BMP)	:	
SAMP	PLE INVEN								
	1	tles Collected	·- '7')		Filtration	Preservation		Remarks	
Time	Volume	Composition (	(G, P)	No.	(Y / N)	(type)		ntrol sample, other)	
	40 mL	J 5		4	N	HCL	XOC		
	-	<del> </del>			<del> </del>				
	<del>  </del>	<del>                                     </del>							
	<del> </del>	t			-				
	<u> </u>					<u> </u>	The Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of the Art of		
Commen	its:					,	Tetra Tech, 1 7800 Shoal Cree		
							Suite 253 E	Cast	
						(E10) 999	Austin, TX 78		
						(512) 338	-166/ rax	x (512) 338-1331	

GRO	UNDWAI	ER SAMP	LING RE	CORD	PAGE of			
Project I	Number: 114-(	02/356 loi.1	Project Name	: FORMOSA	4th OTE 2	2011 D	Date: 11/29/11	
Sample			02		Starting Water	Level (ft. BMP):	NA	
Samplin	g Location (we	ll ID, etc.); 🏌	B-02		Casing Stickup			
Sampled	l by: ARMI	1 TE			Starting Water	Level (ft. BGL):		
Measuri	ng Point (MP) o	of Well:	ИA		Total Depth (ft	. BGL):		
Screene	d Interval (ft. E	BGL):			Casing Diamet	er (In ID):		
H _	ck Interval (ft.		4		Casing Volume	e (gal.):	V	
QUAL	ITY ASSU	RANCE						
METH	DDS (describe)	:				•		
Cleani	ng Equipment	**	<u>NA</u>					
Purgir	ıg:			Sampling:		NA		
Dispos	sal of Discharg	ed Water:						
INSTRU	MENTS (Indica	ite make, model	(.b.l.)					
Water	Level:	N	4	_ Thermometer:		NA		
рН Ме	eter:			_ Field Calibrati	ion:			
Condu	ectivity Meter:			Field Calibration:				
1	/ Filter Size:			Other:		V		
SAMF		ASUREMEN						
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L /m)	Temp.   (oC)   pH	Spec. Cond. (mmhos/cm)	Color	Turbidity	Remarks	
Tane	(Gux. 02 2)							
	1	FIELD BlA.	JK (FB-	OZ) HEXT	TO P-3	15 X		
	412-	CC-VOIN		J. Acat.				
Water L	evel (ft. BMP) a	t End of Purge:			Sample Intake	Depth (ft. BMP);	40	
SAMP	LE INVEN	TORY						
		les Collected		Filtration	Preservation		temarks	
Time	Volume	Composition	(G, P) No.	(Y / N)	(type)		trol sample, other)	
1155	40 ml	<u> </u>		N N	HCL	XOC		
			<u> </u>			Tetra Tech, I	Ino.	
Commer	its:		<u>, ,</u>			7800 Shoal Cree		
						Suite 253 E		
	<u></u>			رح-ا	(512) 338	Austin, TX 78	8757 x (512) 338-1331	
					(212) 336	O TOO! I'AM	1 (012) 000 1001	

GROU	NDWA7	TER SAMF	LIN	3 RE	CORD		PAG	E of[	
Project Nu	mber: //4-6	21356 101.1	Project	Name:	FORMOSA	4th QTR 20	>11	Date: [1(29/201/	
Sample N	umber:	ρ. ς	51			Starting Water		11 12	
Sampling	Location (we	ell ID, etc.):	ρ.,	5 L		Casing Stickup	o (ft.):		
Sampled b	Dy: ARW	(/TE				Starting Water	Level (ft. BGL	):	
Measuring	g Point (MP)	of Well:	0C ,	/PV	<u></u>	Total Depth (ft	. BGL):		
Screened .	Interval (ft. I	BGL):				Casing Diamet	er (In ID):	2"	
Filter Pacl	c Interval (ft.	BGL):			<b>1</b>	Casing Volume	e (gal.):		
<b>QUALI</b>	TY ASSU	RANCE							
метног	OS (describe)	:							
Cleaning	g Equipmen	 <b>Ķ</b>	Λ	Al.	CONOX = D	ISTILLED WA	TER RINSE		
Purging		ERISTALTIC	_Puw	φ	Sampling:		SAME	·	
Disposa	l of Discharg	ged Water: (	DUSTE	E DR	UMS				
INSTRUM	ENTS (Indica	ate make, model	, I.d.)						
Water L	evel:	, WATER IL	-		Thermometer:	Ho	RIBA UZZ	-XV	
pH Mete	r: <u>}</u>	ORIBA UZ	<u>'2xy</u>		Field Calibrati	on:	n BUFFER 4	01 È 7,00	
Conduct	ivity Meter:	HORIBA	UZ:	21/7	Field Calibrati	on: / 💃	ORIBA HUTE	SCAL 100-4	
Filter / I	Filter Size:				Other: Turk	100. / ORP	HORIBA F	UTOCA	
		ASUREMEN							
1216 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	рН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV	
221	1.0	0,2	25,7	7,34	1,120	CEAR	3.0	20 +52	
1226	2.0	1	25.8		1.030	CLEAR	2,8	1,9 +49	
1231	3,0	1	25.7	728	1,010	CLEAR	2.7	11.8 +47	
			•						
		t End of Purge:		09		Sample Intake	Depth (ft. BM)	P):	
SAMPL	E INVEN							<i></i>	
Time	Volume	les Collected Composition (	C DI	No.	Filtration (Y / N)	Preservation	(arra)its an	Remarks	
		Composition	G, F)	4	N	(type) HCL		ontrol sample, other)	
1233	40mL			7	1 1	HCL_	VOC		
		<del>,</del>							
						<u>-,</u>			
Comments	<u> </u>						Tetra Tech	. Inc.	
						7800 Shoal Creek Blvd.			
					TE		Suite 253		
					(512) 338	Austin, TX -1667 Fa	78757 ax (512) 338-1331		
						,			

GRO	UNDWA'	TER SAMI	PLIN	G RE	CORD	PAGE _   _ of			1
Project I	Number: 114-6	021356 101.1	Project	Name:	FORMOSA	4th OTR 20	)   	Date: 1	129/2011
1	Number:		D-50			Starting Water			18,40
Samplin	g Location (w	ell ID, etc.):	P-,	50		Casing Sticku	p (ft.):		
Sampled	iby: ARN	1/TE				Starting Water	Level (ft. BGL	):	
Measuri	ng Point (MP)	of Well:	ŌC.	/PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft. 1	BGL):				Casing Diame	ter (In ID):		
Filter Pa	ck Interval (ft	. BGL):				Casing Volume	e (gal.):		
QUAL	ITY ASSU	JRANCE							
METHO	DDS (describe	):							
Cleani	ng Equipmen	<del>'</del> ;		Al	CONOX FD	ISTILLED W	ITER RINSE	-	
Purgin	ıg: <u>†</u>	ERISTALTIC	Pun	φ	Sampling:		SAME		
Dispos	sal of Dischar	ged Water:	DHSIT	E DR	UMS				
INSTRUI	MENTS (Indica	ate make, model	i, I.d.)						
Water	Level:	, WOTER IN	(E Sc	O	Thermometer:	A	PIBA UZ	ZXV	
рН Ме	ter:	ORIBA UZ	<u>z xt</u>	7	Field Calibrati	on:	h BUFFER 1	101 E	7,000
Condu	ctivity Meter:	HORIBA	UZZ	2XV_	Field Calibrati	oņ:	DRIBA HUTE	<u>scal</u> 100	<u> </u>
Filter /	/ Filter Size:		_		Other: TURB	100. /ORP	HORIBA F	UTOCAL	,
SAMP		ASUREME							<u> </u>
125( Time	Cum. Vol.	Purge Rafe (gal. of L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	MG/L DO Rei	m∨ narks ORP
1256	1.0	0.2	23.6	10.107	13,100	CLEAR	13.4	1.7	53
1301	2,0	)	23.7	667	13,100	CLEAR	12,7	115	45
1306	3.0	di	23,7	10.109	12,900	CLEAR	12.1	1.5	53
		*							
		t End of Purge:	19,	2D		Sample Intake	Depth (ft. BMI	P):	
SAMP	LE INVEN								
//V		les Collected Composition (	(C D)	NT.	Filtration	Preservation		Remarks	
Time	Volume	Composition	G, P)	No.	(Y / N)	(type)		ntrol samp	e, other)
1308	40mL				N	HCL	Voc		
	-								
									,
							To to a To a la	T	
Comment	w.		·- <u>-</u>			Tetra Tech, Inc. 7800 Shoal Creek Blvd.			
							Suite 253	East	
						(K10) 200	Austin, TX		1001
						(512) 338	-100/ Fa	ax (512) 338	5-1331

GRO	UNDWA'	TER SAMI	PLIN	G RE	CORD		PAGE of		
Project	Number:   4-6	021356 101.1	Projec	t Name:	FORMOSA	4th OTR 20	)// 	Date:	11/28/11
31	Number:	$\Gamma$	)-21			Starting Water			19,93
Samplir	ng Location (w	ell ID, etc.):	D-	21		Casing Stickup	o (ft.):	<u></u>	
Sample	d by: ΔRW	/IE				Starting Water	Level (ft. BGL	): _	
Measur	ing Point (MP)	of Well:	ŌC.	/ PV	C	Total Depth (ft			
Screene	d Interval (ft.					Casing Diamet	er (In ID):		2"
Filter Pa	ick Interval (ft	., BGL): -				Casing Volume	e (gal.):		•
QUAI	ITY ASSU	JRANCE							
METH	ODS (describe	):	····						
Clean	ing Equipmen	ŧ;		A	CONOX = D	ISTILLED WA	TER RINSE		
Purgir	ng:	ERISTALTIC	Pun	-Q-	Sampling:		SAME		
Dispo	sal of Dischar	ged Water: (	DUST	E DR	UMS				
INSTRU	MENTS (Indic	ate make, model	, I.d.)						
Water	Level:	WATERLINE	E 30	8	Thermometer:	Ac	RIBA 1)Z	2 XV	
рН Ме	eter:	Joriba Uz	1X 52	2	Field Calibrati	ion:	n BUFFER L	tol È	7,00
Condu	ictivity Meter:	HORIBA	1):Z	<u> </u>	Field Calibrati	ioņ:	DRIBA HUTE	scal 1	00-4
Filter	/ Filter Size:				Other: Jugg	100/ORP	HORIBA /	UTOCA	<u> </u>
		asuremen							
323 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L /m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	D.O.	m∨ Remarks ORP
1328	1.0	0,2	23.7	8.78	5,260	CLEAR	4,5	20	-/3 <i>5</i>
13.33	200	1	23,7	6,67	7.580	CLEAR	3.7	1.6	-244
1338	30		23.7	lotot	7.720	CLEAR	3,3	13	-270
1343	40	4	23.7	6109	7,730	CLEAR	3.1	1,2	-250
			,	,					
		t End of Purge:	¥0	,04		Sample Intake	Depth (ft. BM)	P):	
SAMP	LE INVEN								
Time	Volume	les Collected Composition (	G Pl	No.	Filtration (Y / N)	Preservation	(avality or	Remark	
<del></del>	40mL	G	(J, I)	Ц	N	(type)		ontroi sai	mple, other)
1345	-90ML			7	/N	HCL	VOC		
						·		<del></del>	
								<del></del> ;	<del></del>
Commen	ts:						Tetra Tech	. Inc.	
<u> </u>	······································		· · · · · · · · · · · · · · · · · · ·			7800 Shoal Creek Blvd,			
	<del></del>		-				Suite 253 Austin, TX		į
						(512) 338-			338-1331
						<del></del>			· -

GRO	UNDWA	TER SAMI	PLIN	G RE	CORD		PAG	E of	į
Project	Number: [[4-	021356 101.1	Project	t Name:	FORMOSA	4+h QTR 20	). ).II	Date: 11	129/2011
E	Number:	P				Starting Water			17,33
Samplii	ng Location (w	vell ID, etc.):	P-	10		Casing Sticku	p (ft.):		
Sample	d by: ∠RW	1 / TE				Starting Water	Level (ft. BGI	.):	
Measur	ing Point (MP)	of Well:	OC.	/PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft.	BGL):	· · · · · ·			Casing Diamer	ter (In ID):		2.11
	ack Interval (f				\	Casing Volume	e (gal.):		
QUAI	JTY ASSU	URANCE							
METH	ODS (describe	e) <u>:</u>		,					<u> </u>
Clean	ing Equipmen	rt.;	^	Al	CONOX F	ISTILLED W	TER RINSE		
Purgi	ıg:	ERISTALTIC	Pun	φ	Sampling:		SAME		
Dispo	sal of Dischar	ged Water: (	DNSTA	E DR	UMS				
INSTRU	MENTS (Indic	ate make, mode	l, I.d.)						
Water	Level:	WATER			Thermometer:	J.	RIBA UZ	ZXV	
рН Ме	eter:	Horiba U.	22_X	$\nabla$	Field Calibrati	ion:	n BUFFER	401 =	7,08
Condi	ictivity Meter:	HORIBA	<u>UZ</u>	ZXD	Field Calibrati	on:	DRIBA AUTO	SCA! 100	-4
Filter	/ Filter Size:				Other: TURB	100.10RP	HORIBA K	JUTOCAL	
		ASUREME							
月2 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L/m)	Temp. (oC)	рН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L	m∨ marks ORP
1417	10	0.2	25,4	6,56	16,700	CLEAR	18,3	1,6	-176
1422	2.0		25.4	650	16,500	CEAR	14.7	1,5	-168
1427	3.0		25,5	6,59	15,400	CLEAR	12.3	1,4	<u>-)55</u>
1432	4.0		25.4	6.60	15,200	CEAR	12.1	1.3	-150
	`								
	<del></del>								·
·									
		it End of Purge:	[8.	58		Sample Intake	Depth (ft. BM)	P):	
SAMP	LE INVEN								
Time	Bott Volume	les Collected Composition (	C D)	No.	Filtration	Preservation		Remarks	
		Composition	G, F)	Ц	(Y / N)	(type)	····	ntrol samp	le, other)
1434	40mL				<u>N</u>	HCL	VOC		<del></del>
							<u> </u>		
									-
ommen	is.						Tatro To-1-	Inc	
WHITE II		<u> </u>				7	Tetra Tech 7800 Shoal Cr		į
							Suite 253	East	
			<del></del>			(512) 338-	Austin, TX		0 1001
						(012) 000	1001 F8	ax (512) 33	0-1001

GRO	UNDWAI	ER SAMP	LINC	REC	CORD		PAGE	E of
Project N	Vumber: //4-1)	21356 101.1	Project	Name:	FORMOSA	4th QTR 20	)[[	Date: 11/29/2011
Sample		D.	- 41			Starting Water		A + 1/()
Samplin	g Location (we	ll ID, etc.):	D-	-41		Casing Stickur	(ft.):	<u> </u>
Sampled	iby: ARW	1 TE				Starting Water	Level (ft. BGL)	·
Measuri	ng Point (MP)	of Well:	OC /	1 PV		Total Depth (ft.	. BGL):	
Screene	d Interval (ft. E				_	Casing Diamet	er (In ID):	2 (
Filter Pa	.ck Interval (ft.	BGL):				Casing Volume	e (gal.):	
QUAL	ITY ASSU	RANCE					***	
метно	DDS (describe)	:		·				
Cleani	ng Equipment	<del>-</del>		Al	CONOX FD	ISTILLED WA	TER RINSE	
Purgin	ng:	ERISTALTIC	Puw	φ	Sampling:		SAME	
Dispos	sal of Discharg	ged Water: (	DUSTE	E DR	UMS			
INSTRUI	MENTS (Indica	ite make, model	, I.d.)					
Water	Level:	,	£ 30		Thermometer:	He	· · · · · · · ·	2 <u>X</u> 7
рН Ме	eter:	ORIBA UZ	7X X5	2	Field Calibrati	317	· · · · · · · · · · · · · · · · · · ·	OL \$ 7,00
Condu	ictivity Meter:	HORIBA	UZ	ZXZ	Field Calibrati	on:	DRIBA HUTE	
II	/ Filter Size:		·····.	<u> </u>	Other: Turk	/DO:/ORP	HORIBA L	UTOCA
l		ASUREMEN		,			· · · · · · · · · · · · · · · · · · ·	
THSW Time	Cum. Vol.	Purge Rate (gal. of L/m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L m∨ D.O, Remarks ORP
1501	1,0	0.2	23,3	650	7,400	CLEAR	6.7	15 -37
1506	2.0		23,4	6.52	7,280	CIEAR	6,8	1,3 -40
1511	3.0		23,4	6,55	7,150	CLEAR	1016	11 -44
1516	4.0	<b>V</b>	23,3	6.55	7.160	CLEAR	(o, 4	1,0 -45
							1	
ß		t End of Purge:	20	1.50		Sample Intake	Depth (ft. BM)	P):
SAMP	LE INVEN		<u> </u>					
	Bott Volume	les Collected Composition	(C P)	No.	Filtration (Y / N)	Preservation (type)	(quality eq	Remarks ontrol sample, other)
Time		Composition	((1, 1)	ИО.	N	HCL	VOC	muoi sampie, other)
1518	40mL		<del></del> .	7	X	nci.	VUC	
							<u> </u>	
Commen	nte:			<b>!</b>			Tetra Tech	ı, Inc.
Commen		. <del></del>					7800 Shoal Cr	eek Blvd.
							Suite 253 Austin, TX	
			···			(512) 338		ax (512) 338-1331
					<u> </u>			

GRO	UNDWA7	TER SAMI	PLINC	3 RE	CORD		PAG	E of	<u>L</u>
Project I	Number: 114-6	121356 101.1	Project	: Name:	FORMOSA	4th QTR 20	>!!	Date: 11/2	29/2011
Sample	Number:	D-	39			Starting Water			18,20
Samplin	g Location (w	ell ID, etc.):	D-3	39		Casing Stickup	o (ft.):		
Sampled	1 by: ΔRW	1/TE				Starting Water	Level (ft. BGL	):	
Meașuri	ng Point (MP)	of Well:	5c.	/PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft. 1	BGL): —				Casing Diamet	er (In ID):		2"
Filter Pa	ck Interval (ft	.BGL): –				Casing Volume	e (gal.):		
QUAL	ITY ASSU	JRANCE							
METHO	DDS (describe	):							
Cleani	ng Equipmen	ŧ;	Λ—		CONOX = D	ISTILLED WA	TER RINSE		
Purgin	ıg:	ERISTALTIC	Pum	φ	Sampling:	·· · · · ·	SAME		
Dispos	sal of Dischar	ged Water: (	DNSTE	E DR	DMR				
INSTRUI	MENTS (Indica	ate make, model	, I.d.)						
Water	Level:	, WATER !	NE 3	<u> </u>	Thermometer:	H		ZXD	
рН Ме	ter:	ORIBA UZ	<u> 2 XV</u>		Field Calibrati	on: D	h BUFFER 1	tol = 7	7,00
Condu	ctivity Meter:	HORIBA	UZZ	<u> </u>	Field Calibrati	o <del>ာ</del> း / 💃	DRIBA HUTE	scal 100	-4
	/ Filter Size:		_		Other: TURB	/D.O./ORP	HORIBA [	UTOCAL	
		ASUREMEN			, ,-, -, -, -, -, -, -, -, -, -, -, -, -		<b>.</b>		
1536 Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L DO Ren	m∨ narks ORP
1541	1.0	0,2	23,4	7.08	5,030	CEAR	10,4	13	-256
1546	2,0		23,4	7.10	5,040	CLEAR	86	10	1262
1551	3.0	*	23,4	7,10	5,040	CLEAR	8,4	0.9	-265
		-	<u> </u>						
					· · · · · · · · · · · · · · · · · · ·				
		t End of Purge:	18,3	22		Sample Intake	Depth (ft. BM)	P):	
SAMP.	LE INVEN			·		· · · · · · · · · · · · · · · · · · ·		·	
Time	Volume	les Collected Composition (	(C D)	No.	Filtration (Y / N)	Preservation	(assaltter oa	Remarks	
		Composition (	ω, 1)	Ц	N	(type) HCL		ontrol sampl	e, other)
1553	40mL				TA TA	HCL	VOC		
								· · · · · · · · · · · · · · · · · · ·	
								<del></del>	
Commen	fs:						Tetra Tech	Inc	
						,	7800 Shoal Cr		
		<u> </u>			TE		Suite 253		
			<del></del> -			Austin, TX 78757 (512) 338-1667 Fax (512) 338-1331			3-1331
·						,		- () 000	

GROU	NDWA'	TER SAMI	PLIN	G RE	CORD		PAC	GE of	
Project Nu	mber: //4-(	021356 101.1	Projec	t Name:	FORMOSA	4th QTR 20	2//	Date: 11/29/2011	
Sample Nu		P-1				Starting Water Level (ft. BMP): 1928			
Sampling	Location (w	ell ID, etc.):	P-4	8		Casing Stickup (ft.):			
Sampled b	y: ARV	1/TE				Starting Water Level (ft. BGL):			
Measuring	Point (MP)	of Well:	ŌC	/ PV	C	Total Depth (ft. BGL):			
Screened I	nterval (ft. 1	BGL):				Casing Diameter (In ID):			
Filter Pack	Interval (ft	. BGL):			2	Casing Volum			
QUALI'	ry assu	JRANCE			· · · · · · · · · · · · · · · · · · ·				
METHOD	S (describe	):							
Cleaning	Equipmen	<del>-</del>	Δ		CONOX = 1	ISTILLED WA	ITER RINSE		
Purging:		ERISTALTIC	_Pun	νρ	Sampling:		SAME		
Disposal	of Dischar	ged Water: (	DHSIT	E DR	UMS				
INSTRUME	ENTS (Indica	ate make, mode							
Water Le	vel:	WATERIN	7. BC	Ø .	Thermometer:	Ho	RIBA ()Z	ZXV	
pH Meter	r: <u> </u>	ORIBA UZ	ZXP		Field Calibrati	on:	h BUFFER L	1.01 = 7,00	
Conduct	ivity Meter:	HORIBA	UZZ	XV	Field Calibrati	on:	DRIBA AUTO	5cal 100-4	
Filter / F	ilter Size:				Other: Tues	/DO /ORP	HORIBA !		
SAMPL	ING ME	ASUREME	ITS				1 1 - 1 - 1 - 1	1010040	
1476777	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	рН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV	
1613	1.0	0,2	23,4	6.64	14,000	CLEAR		D.O. Remarks ORP	
1618	2.0	1	23.4	6,65	14,000	CKEAR	31.7	09 -50	
1623	3.0	1	23,4	6.67	14,000	CEAR	26.7	0.9 -50	
142532			7	V V	1 (1100	C.(CHC	<u> </u>	0,0 -41	
							- ···		
Water Level	(ft. BMP) a	t End of Purge:	20,	00		Sample Intake	Depth (ft. BM	P):	
SAMPLI	E INVEN	TORY							
		es Collected			Filtration	Preservation		Remarks	
	Volume	Composition (	G, P)	No.	(Y / N)	(type)	(quality co	ontrol sample, other)	
1625	40mL	<u> </u>		4	N	HCL	VOC		
			·						
			<u> </u>				*		
Comments:						_	Tetra Tech		
						7800 Shoal Creek Blvd. Suite 253 East			
		<del></del>					Austin, TX		
						(512) 338-	-1667 Fa	ax (512) 338-1331	

GRO	UNDWA	TER SAM	PLIN	G RE	CORD		PAGE of		
Project	Number: [] 년	-021356	Projec	t Name:	Formusa	4th atr	2011	Date: 11/2	.9/11
Sample	Number: (	25-5				Starting Water	Level (ft. BMI		
Samplii	ng Location (v	vell ID, etc.): 🎉	?5.5			Casing Sticku	p (ft.):		
Sample	d by: /	7€				Starting Water	Level (ft. BGL	J):	
Measur	ing Point (MP	of Well: TO	=/PU	<u>C</u> .		Total Depth (ft	. BGL):		
Screene	d Interval (ft.	BGL):				Casing Diame	ter (In ID);		
Filter Pa	ack Interval (f	t. BGL):				Casing Volume	e (gal.):		
QUAI	lity Assi	URANCE							<del></del>
METH	ODS (describe	e):							
Clean	ing Equipmer				Honox E	Distilled	water	Bins e	
Purgir	ng:	leristaltic	Comp	)	Sampling:		Same		
Dispo	sal of Dischar	ged Water:	)nsite	Drum	5_5				
INSTRU	MENTS (Indic	ate make, mode	l, I.d.)						<u> </u>
Water	Level:	Waterline	Equipo	300	Thermometer:		10iba U-5		
рН Ме	eter:	Horiba U-			Field Calibrati	on: O	H Buffer p	H-7.00jpH1	0.00
Condu	ictivity Meter:	Horib	a U-5	. 2	Field Calibrati	on:	toriba Aut	od ph b	1.00
Filter	/ Filter Size:				Other: Turk	10.0.10R	P Hont	. #i	,
SAMP		asuremei							
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L/m)	Temp. (oC)	рH	Spec. Cond. (mmhos/cm)	Color	T 1: 1:4.	0.	
1605	(gas. 01 2)	igar or bym	23.7	6,93			Turbidity	Po Remark	SORP
16602			7.1	وا به	160	Neutral	6.4	4.1	<u>- එඑ</u>
									·
							·		
	· . · . · . · . · . · . · . · . · . · · . · · · · · · · · · · · · · · · · · · · ·						· · · · · · · · · · · · · · · · · · ·		<del></del>
									<del></del>
Water Le	vel (ft. BMP) a	it End of Purge:				Sample Intake l	Depth (ft BME	).	
SAMP	LE INVEN	ITORY				1		,	
	Bott	les Collected			Filtration	Preservation		Remarks	(100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 1
Time	Volume	Composition (	(G, P)	No.	(Y / N)	(type)		ntrol sample, ot	:her)
1610	Homl	<u> </u>		54	N	Hei	V09	2	
		<u> </u>							
Comment	s:					-	Tetra Tech,		
					L. L. L. L. L. L. L. L. L. L. L. L. L. L	7800 Shoal Creek Blvd. Suite 253 East			
							Austin, TX 7		
			····			(512) 338-	1667 Fa	x (512) 338-133	31

GRO	UNDWA	TER SAM	G RE	CORD	PAGE				E of	
Project	Number:     닉 -		Projec	t Name:	Formusa	41	atr	2011		Date: 11/29/1
Sample	Number:	RS-4				1		Level (ft.	BMP	
Samplir	ng Location (w	vell ID, etc.): K	5-4			7	ng Sticku		,	, ·
Sample	d by:	7 <del>€</del>				7		Level (ft.	BGL)	
Measur	ing Point (MP)	of Well:	-1PU	<u> </u>		⊣	Depth (ft		,	
Screene	d Interval (ft.		<u> </u>			_		ter (In ID):		
Filter Pa	ack Interval (ft	t. BGL):				7	ng Volume			
QUAI	ITY ASSU	JRANCE					-5 , 01	o (gaz.).		
METH	ODS (describe	e):							-	
	ing Equipmen				Iconox E	();	stilled	1. rate		Rinca
Purgir		Peristaltic	Puma	)	Sampling			Squel	<u></u>	111/18
_	sal of Dischar		nsite			•		24 mag		
		ate make, mode		مري <u>ا</u> ک	)			· · · · · · · · · · · · · · · · · · ·		
Water			<del></del>	300	Thermometer:		14	uriba ()	5	2
рН Ме		Horiba U-	52		Field Calibrati					
-	ctivity Meter:	Horiba		· ")	Field Calibrati			too'ba	A Ha	17.00)pH 10.0
	/ Filter Size:		<u></u>	· · · · · · · · · · · · · · · · · · ·	Other: Tark		الم الم	191.10g /		A V
		ASUREME	ITS	<u>,                                    </u>	) ( ) ( )	» / D.	0.100		<u>d n v</u>	a Atrical
	Cum. Vol.	Purge Rate	Temp.		Spec. Cond.					
Time	(gal. or L)	(gal. or L/m)	(oC)	pН	(mmhos/cm)	C	Color	Turbid	ity	P.O Remarks 0
1555		<b></b>	24.0	7.03	4220	No	estral	0.0		4.2
	· · · · · · · · · · · · · · · · · · ·									
									_	
		t End of Purge:				Samp	le Intake i	Depth (ft.	BMP)	1:
SAMP	LE INVEN				The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s					
Time	Volume	les Collected Composition (	C D)	No.	Filtration		rvation			Remarks
	Home	G	G, 1)	H	(Y / N)	· · · · · · · · · · · · · · · · · · ·	ype)			ntrol sample, other)
1600	10mC				N	HC		<u>L</u>	10 C	, 
	-C: *							<i>T</i> : :=	. 1	¥.
omment					13344		7	Tetra T 800 Shoa		
<del></del>							,	Suite 2		
						,.	<b>-10</b> \ 00=	Austin,		
	<del></del>				<u> </u>	((	512) 338-	1667	Fax	x (512) 338-1331

GRO	UNDWA1	TER SAMP	LING	REC	CORD		PAGE	C of
Project N	Number: //4-0	21356 101.1	Project	Name:	FORMOSA	4th OTR 20	)[[	Date: 7/29/11
		)-24				Starting Water		1
Samplin	g Location (we	ell ID, etc.):	0-2	4		Casing Stickup	(ft.):	
Sampled	l by:	1 TE				Starting Water	Level (ft. BGL):	<u> </u>
Measuri	ng Point (MP)	of Well:	ŌC /	PV		Total Depth (ft.	BGL):	
Screene	l Interval (ft. I	BGL):			_	Casing Diamet	er (In ID):	24
Filter Pa	ck Interval (ft.	BGL):				Casing Volume	(gal.):	
QUAL	ITY ASSU	RANCE						
метно	DDS (describe)	:						
Cleani	ng Equipment	<b>ξ</b>	^	_ Ak	CONOX = D	ISTILLED WA	_	
Purgin	ıg:	ERISTALTIC	Hum	<b>p</b>	Sampling:		SAME	
Dispos	sal of Discharg	ged Water: (	DHSITE	DR	UMS			
INSTRUI	MENTS (Indica	ate make, model	, I.d.)					
Water	Level:	1			Thermometer:		RIBA	
рН Ме	ter:	IORIBA			Field Calibrati	N:N	A BUFFER	
Condu	ctivity Meter:	HORIBA			Field Calibrati	on:	EXPLIBA HUTG	
	/ Filter Size:		<u> </u>		Other: Tues	/DO./ORP	HORIBA A	UTOCA
SAMP		ASUREMEN			· · · · · · · · · · · · · · · · · · ·			
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV D.O. Remarks ORP
1520	1	6.2		9.09	4180	Newfrul	36.3	
1525	7	0.2	25,5	9,20	40les	Magtral	296	2,76 -197
1535	-73	0.2	255	9.23	4000	Newful	27.5	2.52 -195
1777		<u> </u>			W-W-	2 42.8		
Water Le	evel (ft. BMP) a	t End of Purge:				Sample Intake	Depth (ft. BMF	?):
SAMP	LE INVEN	TORY						
		les Collected	(0. 70)		Filtration	Preservation		Remarks
Time	Volume	Composition	(G, P)	No.	(Y / N)	(type)		ntrol sample, other)
1540	40mL	<u> </u>		4	N	HCL	VOC	
							· · · · · · · · · · · · · · · · · · ·	
				<u></u>				
1							Totro Took	Inc
Commen	its:	· · · · · · · · · · · · · · · · · · ·					Tetra Tech 7800 Shoal Cre	
							Suite 253	
						(512) 338	Austin, TX	78757 ax (512) 338-1331
						(012) 000	rauge Fo	M (012) 000*1001

GRO	UNDWAI	ER SAMP	LINC	REC	CORD		PAG	E of
Project N	Number:   4-0	213,5% 101.1	Project	Name:	FORMOSA	4th QTR 20	>II	Date: 7/29/11
ti	Number:	1-3				Starting Water		): 18274
Samplin	g Location (we	ll ID, etc.): 0-	2			Casing Stickup	(ft.):	
Sampled	l by:	/IEI				Starting Water	Level (ft. BGL)	):
Measuri	ng Point (MP) (	of Well:	5c /	PV		Total Depth (ft.	BGL):	
\ <del>-</del>	i Interval (ft. E				_	Casing Diamet	er (In ID):	2"
Filter Pa	ck Interval (ft.	BGL):				Casing Volume	(gal.):	
QUAL	ITY ASSU	RANCE						
метно	DDS (describe)							
Cleani	ng Equipment	<del>'</del>	Λ	Alc	CONOX FD	ISTILLED WA	<u> </u>	
Purgin	ig: <u>†</u>	ERISTALTIC	Pum	<b>P</b>	Sampling:		SAME	
Dispos	sal of Discharg	ged Water:	) NSII	E DR	JWLS			
INSTRUI	MENTS (Indica	ite make, model	, I.d.)					
Water	Level:	\ <del></del>			Thermometer:	Ho	RIBA	
рН Ме	eter:	ORIBA			Field Calibrati	. 34.1	1 ROFFER	
Condu	ictivity Meter:	HORIBA			Field Calibrati	on:	EXIBA HUTE	
	/ Filter Size:	·			Other: Turk	<u>/D.o./orp</u>	HORIBA !	UTOCA
SAMP		asuremen				<b>-</b>		
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	рH	Spec. Cond. (mmhos/cm)	Сою	Turbidity	mg/L mV
1440	1	0-2	25.7	6:23	8600	Newford	199	3,10 -69
1445	2	0.2	256	1	5580	restal	130	1.98 -71
1456	3	0.2	25.6	0.17	SSIO	Neith	112	1,77 -74
1455	24	6.0	25.7	6,21	5402	beith	Stile	1.60 -75
1 1-	<del></del>		<i></i>					
Water Le	evel (ft. BMP) a	t End of Purge:				Sample Intake	Depth (ft. BM	IP):
SAMP	LE INVEN							
		les Collected	(A) T)	T	Filtration	Preservation	( 1.1	Remarks
Time	Volume	Composition	(G, P)	No.	(Y / N)	(type)	<del>-</del>	ontrol sample, other)
1500	40mL	G		14	N	HCL	VOC	
ļ			<del></del>					
		-		<u> </u>			Tetra Tecl	h Inc
Commer	118:						7800 Shoal C	
			<u></u>				Suite 253	
<b></b>			·			(512) 338	Austin, TX 3-1667 F	78757 Fax (512) 338-1331
<u></u>						(312) 000	100.	(015) 000 1001

GRO	UNDWA'	TER SAMI	PLIN	G RE	CORD		PAG	E of	
Project	Number: //4-(	021356 101.1	Projec	t Name:	FORMOSA	4th QTR 20		Date: 7/2	9111
Sample	Number: C	1.3				Starting Water			62
Samplir	ng Location (w	ell ID, etc.): 🍌	`3			Casing Stickuj	o (ft.):	·	
Sample	d by:	/TE		_		Starting Water	Level (ft. BGL	.):	
Measur	ing Point (MP)	of Well:	OC	7 PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft.					Casing Diamet		211	
Filter Pa	ack Interval (ft	. BGL): -				Casing Volume			
QUAI	ITY ASSU	JRANCE				· · · · · · · · · · · · · · · · · · ·			
метн	ODS (describe	):							
Clean	ing Equipmen	<del></del>		AI	CONFIX F D	ISTILLED WA	TER RINSE		
Purgir	ng:	ERISTALTIC	Pun		Sampling:		SAME		
Dispos	sal of Dischar	ged Water:	•	E DR		-			
		ate make, mode		<u> </u>	<u> </u>				
Water					Thermometer:	J.	PIBA		
рН Ме	eter:	ORIBA			Field Calibrati	1	1 BUFFER		
_	 ctivity Meter:	HORIBA			Field Calibrati	31:14	DRIBA AUTO	Scol	
	/ Filter Size:				Other: Tues	I. $I$	HORIBA A		
		ASUREMEN	ITS		TOEB		DOUBH F	UIUCAI	
	Cum. Vol.	Purge Rate	Temp.	1	Spec. Cond.			mall	mV
Time	(gal. or L)	(gal. or L/m)	(oC)	pН	(mmhos/cm)	Color	Turbidity	D.O Remar	ks ORP
15	(	0.2	27.6	7.02	6110	Markal	50.6	262	-63
1426	7	0.2	25.9	6.89	6280	bertal	39,4	2.20	-79
1425	3	0.2	25.8	6.88	6306	latril	34,5	2.5	-82
							***		
			. <u>.</u>						
		t End of Purge:				Sample Intake	Depth (ft. BM)	P):	
SAMP	LE INVEN					<u> </u>			
Time	Volume	les Collected Composition (	(C D)	N-	Filtration	Preservation		Remarks	
		G	G, F)	No. Ц	(Y / N)	(type)		ontrol sample, o	other)
1430	40mL	<u></u>		_+	<u>N</u>	HCL	Voc		
						<u> </u>			
Comment	tor					-	W + C *	•	
Johnnen	18.		-			7	Tetra Tech 800 Shoal Cr		
						,	Suite 253		
<del></del>			····-			(#10) 000	Austin, TX		
				<u>_</u>		(512) 338-	1667 Fa	ax (512) 338-13	331

<b>GROUNDWAT</b>	ER SAMP	LING RE	CORD		PAGE	of
Project Number:   4- (				4th QUE 2	oll I	Date: 9/29/11
	B-03 =			Starting Water	Level (ft. BMP):	NA .
Sampling Location (we	il ID, etc.):	Bos		Casing Stickup	(ft.):	
Sampled by:				Starting Water	Level (ft. BGL):	
Measuring Point (MP)	of Well:	NA		Total Depth (ft.	BGL):	
Screened Interval (ft. I				Casing Diamet	er (In ID):	
Filter Pack Interval (ft.	BGL):	Ą		Casing Volume	(gal.):	<u> </u>
QUALITY ASSU	RANCE					
METHODS (describe)	:					
Cleaning Equipment	<u></u>	NA				
Purging:			Sampling:		NA.	
Disposal of Discharg	ged Water:	V				
INSTRUMENTS (Indica		I.d.)				
Water Level:	N.	4	Thermometer:		NA	
pH Meter:			Field Calibrati	on:		
Conductivity Meter:			_ Field Calibrati	on:		
Filter / Filter Size:	1		Other:			
SAMPLING ME		TS				
Cum. Vol.	Purge Rate (gal. or L /m)	Temp. (oC) pH	Spec. Cond. (mmhos/cm)	Color	Turbidity	Remarks
Time (gal. or L)	(gai. of L/III)	(OC) P11	(IIIIIIIII)	Color	1 and and	Remarks
	= elA	RHL	FR.	034	Over Our	vol
	V ICIO	5)14011			propos	1
43	-7/3	9/11	W	245	NPX	<i>†</i>
<u> </u>	71.0	160			7.00	
	h / 6	ell	10-	1		
<u>'</u>	<b>D</b>		<del>                                     </del>			
Water Level (ft. BMP) a	t End of Purge:			Sample Intake	Depth (ft. BMP	p); ———
SAMPLE INVEN				<del></del>		
	tles Collected		Filtration	Preservation		Remarks
Time Volume	Composition	(G, P) No.	(Y / N)	(type)		ntrol sample, other)
1345 40 MIL	G		N	HCL	YOC	
					ļ	
					<u></u>	
Comments:					Tetra Tech	
					7800 Shoal Cro Suite 253	
					Austin, TX	78757
				(512) 33	8-1667 Fa	ax (512) 338-1331

GROUNDWATER SAM	PLING RE	CORD		PAGE	C of
Project Number: 114-02 1356 101	Project Name:	FORMOBA	4th DIE 2	2011	Date: 7/29//
Sample Number: DD-03			Starting Water		: NA
Sampling Location (well In, etc.):	2000		Casing Stickup	o (ft.):	
Sampled by:	T		Starting Water	Level (ft. BGL):	
Measuring Point (MP) of Well:	MA		Total Depth (ft	. BGL):	
Screened Interval (ft. BGL):			Casing Diamet	er (In ID):	
Filter Pack Interval (ft. BGL):	4		Casing Volume	e (gal.):	V
QUALITY ASSURANCE					
METHODS (describe):					
Cleaning Equipment:	AH				
Purging:		Sampling:		NA.	
Disposal of Discharged Water:					
INSTRUMENTS (Indicate make, mod	el, I.d.)				
Water Level:	[_ <del>}]</del>	Thermometer:	<u></u>	NA	
pH Meter:		Field Calibrati	ion:		
Conductivity Meter:		Field Calibrati	lon:		
Filter / Filter Size:	/	Other:			· · · · · · · · · · · · · · · · · · ·
SAMPLING MEASUREME Cum. Vol.   Purge Rate	NTS	Spec. Cond.	<b>1</b>		
Time (gal. or L) (gal. or L /m)	- 1	(mmhos/cm)	Color	Turbidity	Remarks
14 0 0 1	1. 2	1	91		- i1
W WIR	are 5	ample		42-6	75
A 4			2		
taken (	Plue	OL O-	7		
			•		
Water Level (ft. BMP) at End of Purge	:		Sample Intake	Depth (ft. BMF	P): *
SAMPLE INVENTORY			2		
Bottles Collected Time Volume Composition	(G, P) No.	Filtration	Preservation		Remarks
	(G, F) No.	(Y / N)	(type)	YOC YOC	ntrol sample, other)
020 40 ml G			MCL	XUC	
					· · · · · · · · · · · · · · · · · · ·
Comments:			<u> </u>	Tetra Tech	, Inc.
				7800 Shoal Cr	eek Blvd.
		Tt		Suite 253 Austin, TX	ľ
		لتا	(512) 338		ax (512) 338-1331

GRO	UNDWA7	TER SAMI	PLINC	FRE	CORD		PAG	E of	
Project l	Number: 114-6	121356 101.1	Project	. Name:	FORMOSA	4th QTR 20	oll	Date: '7/	<b>11</b>
Sample		P- 9				Starting Water		·):1	3.96
Samplin	g Location (w	il ID, etc.): 🛮 🖟	-9			Casing Sticku	o (ft.):		·
Sampled	l by:	/TE				Starting Water	Level (ft. BGL	):	
Measuri	ng Point (MP)	of Well:	0C /	1 PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft. 1	BGL):				Casing Diamet	er (In ID):	24	1
Filter Pa	ck Interval (ft.	. BGL):			<u> </u>	Casing Volume	e (gal.):		
QUAL	ITY ASSU	RANCE							
METHO	DDS (describe)	):	_						
Cleani	ng Equipment	Ę	^—	A	CONOX = D	ISTILLED WA	TER RIUSE		
Purgin	g: <u>†</u>	ERISTALTIC	Pum	ρ	Sampling:		SAME		
Dispos	al of Discharg	ged Water: (	DUSTE	E DR	UWG				
INSTRUI	MENTS (Indica	ate make, model	, I.d.)						
Water	Level:	1		······	Thermometer:	Jk.	eigh		
рН Ме	ter:	ORIBA			Field Calibrati	on:	n BUFFER		
Condu	ctivity Meter:	HORIBA			Field Calibrati	oņ: /	DRIBA HUTE	SCA)	
Filter /	Filter Size:	·			Other: TURB	100/ORP	HORIBA F	UTOCAL	
SAMP		ASUREMEN							
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. or L /m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	MG/L D.O Ren	m∨ narks ORP
1316		02	278	6.69	4500	Vertrul	55.1	2,82	9
1315	2	6.0	27.6		4430	Neutral	240	2,11	17
1300	3	0.2	27.5	6.63	4370	Neutral	26.8	2.03	29
		t End of Purge:				Sample Intake	Depth (ft. BM)	P):	
SAMP	LE INVEN								
Time o	Volume	les Collected Composition (	(C D)	No.	Filtration	Preservation	( 114	Remarks	
Time [325]		Composition	u, r)	Ц	(Y / N)	(type)		ontrol sample	e, other)
1000	40ml			_ '†	N	HCL	VOC		
									<del></del> -
		<del></del>						·	
Comment	s: XDup	37 talan	her	1			Tetra Tech	Inc	
<u>John nem</u>	s. r. p. cypi	2 A 18/16W	1 60			•	7800 Shoal Cr		
							Suite 253		
	<u></u>					(512) 338	Austin, TX -1667 Fa	78757 ax (512) 338	-1331
	<del></del>		·····			(5.2) 500		(012) 000	1001

GRO	UNDWA1	TER SAMP	LINC	REC	CORD		PAGI	E of
Project N	Number: //4-/	21356 1011	Project	Name:	FORMOSA	4th OTR 20	oll .	Date: 7/28/11
		1-12				Starting Water		): <u>26.35</u>
	g Location (we	ell ID, etc.): 🕜	~1D			Casing Stickup	o (ft.):	
Sampled	<del></del>	/TE				Starting Water	Level (ft. BGL)	J:
Measuri	ng Point (MP)	of Well:	OC /	PV		Total Depth (ft	. BGL):	
Screene	d Interval (ft. I	3GL): —			<del></del>	Casing Diamet	er (In ID):	2"
Filter Pa	.ck Interval (ft.	BGL): -				Casing Volume	e (gal.):	
QUAL	ITY ASSU	RANCE						
METHO	ODS (describe)	):						
Cleani	ng Equipment	k;	Λ—	AI	CONOX FD	ISTILLED WA	TER RUSE	·
Purgin	rg:	ERISTALTIC	-Pum	<b>P</b>	Sampling:		SAME	
Dispos	sal of Discharg	ged Water: (	DUSTE	E DR	UMC			
INSTRUI	MENTS (Indica	ate make, model	, l.d.)					
Water	Level:	1	·		Thermometer:	Ltc	RIBA	
рН Ме	eter:	ORIBA			Field Calibrati	W.	h BUFFER	
Condu	ictivity Meter:	HORIBA			Field Calibrati	1 / 7	DRIBA HUTC	
11	/ Filter Size:	**************************************	<del>-</del>	. "	Other: TURB	10.0.10RP	HORIBA F	UTOCA
SAMP		ASUREME		<del></del>	Coss Osma	,	·	
Time	Cum. Vol. (gal. or L)	Purge Rafe (gal. or L/m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV D.O. Remarks ORP
1220	1	0.2	27.3	7.08	5570	Neutral	100	5.73 -112
1225	7	0.7	27.0	7.01	5600	Mentral	(13	4.01 -110
1230	3	0.2	24.7	6.97	5570	Newford	108	3.39 ~/07
			<u></u>					
		at End of Purge:		· · · · · · · · · · · · · · · · · · ·		Sample Intake	Depth (ft. BM	P):
SAMP	LE INVEN							
	Bott Volume	les Collected Composition	(C D)	No.	Filtration (Y / N)	Preservation (type)	(quality o	Remarks ontrol sample, other)
Time		Composition	(G, F)	Ц	N	(type) HCL	<del> </del>	mator sample, other)
1235	40mL			7		ncl_	Voc	
			· · · · · · · · · · · · · · · · · · ·					
Commer	ite:		<del></del>	l		<u> </u>	Tetra Tech	ı. Inc.
Commen	us.						7800 Shoal Cr	reek Blvd.
			· · · · · · · · · · · · · · · · · · ·	<del></del> -	Tt		Suite 253 Austin, TX	
						(512) 338		78757 Sax (512) 338-1331
							<del></del>	

GRO	UNDWA	TER SAMF	PLIN	3 REC	CORD		PAG	Eof
Project l	Number:   4-	12/356 101.1	Project	Name:	FORMOSA	4th QTR 20	oll	Date: 7 (29/11
		0 -1				Starting Water		
Samplin	ng Location (w	ell ID, etc.): 🧸	1-0		<del></del>	Casing Stickup	o (ft.):	
Sample	d by:	/TE			· · ·	Starting Water	Level (ft. BGL	):
Measuri	ing Point (MP)	of Well:	OC. 1	/PV	C	Total Depth (ft.	BGL):	
Screene	d Interval (ft. 1					Casing Diamet	er (In ID):	
Filter Pa	ick Interval (ft	. BGL):				Casing Volume	e (gal.):	· · · · · · · · · · · · · · · · · · ·
QUAL	JTY ASSU	JRANCE				· · · · · · · · · · · · · · · · · · ·		
METH	ODS (describe	):		·			10.	
Cleani	ing Equipmen	ţ		Al	CONOX F.	ISTILLED WA	TER RINSE	
Purgir	ng:	ERISTALTIC	DUW	Φ	Sampling:		SAME	
Dispos	sal of Dischar	ged Water: (	DUSTE	E DR	UMS			
INSTRU	MENTS (Indica	ate make, model		<del></del>				
Water	Level:	•			Thermometer:	Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan	PIBA	
рН Ме	eter:	ORIBA			Field Calibrati	ion:	1 BUFFER	
Condu	ictivity Meter:	HORIBA			Field Calibrati	ion:	ORIBA AUTO	Scal .
Filter	/ Filter Size:				Other: Turk	100. ORP	HORIBA F	JUTOCAL
SAMP		ASUREMEN	NTS					
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L /m)	Temp. (oC)	рН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV D.O. Remarks ORP
1025	~		21.6	7.24	6470	Lt. Booch	20.8	5.25 -111
<u> </u>					· · · · · · · · · · · · · · · · · · ·			
		t End of Purge:				Sample Intake	Depth (ft. BM)	P):
SAMP	LE INVEN					<del> </del>		
Time	Volume	les Collected Composition (	(G. P)	No.	Filtration (Y / N)	Preservation (type)	famality or	Remarks ontrol sample, other)
	40mL	G		Ц	N	HCL	VDC	mitor sample, other)
1030	TUML						VUC	
					**************************************			
Commen	ts:						Tetra Tech	. Inc.
						7	7800 Shoal Cr	
					Tt		Suite 253	
					ل	(512) 338	Austin, TX -1667 Fa	78757 ax (512) 338-1331
<del></del>		<del></del>		<u> </u>		·,		(2.11) 000 1001

GRO	UNDWA'.	TER SAMI	PLIN	G RE	CORD		PAG	E of	
Project	Number:   4-(	021356 101.1	Project	t Name:	FORMOSA	4th QTR 20	>!!	Date:	29/11
Sample	Number: $\int$	)-(2				Starting Water		P):	7,22
Samplir	ng Location (w	ell ID, etc.): 💃	7-12	•••		Casing Sticku	ρ (ft.):		
Sample	d by:	/TE				Starting Water	Level (ft. BGL	.):	
Measur	ing Point (MP)	of Well:	<u> </u>	/ PV	C	Total Depth (ft	. BGL):		
Screene	d Interval (ft.	BGL): —				Casing Diame	ter (In ID):	24	
Filter Pa	ack Interval (ft	. BGL): -			`	Casing Volume	e (gal.):		
QUAI	ITY ASSU	JRANCE							****
METH	ODS (describe	):							
Clean	ing Equipmen	ŧ;	^	Al	CONOX FD	ISTILLED W,	TER RINSE		
Purgir	ng: <u> †</u>	ERISTALTIC	Pon	φ	Sampling:	<del></del>	SAME		
Dispo	sal of Dischar	ged Water: (	DUSTI	E DR	UMS				
INSTRU	MENTS (Indic	ate make, mode	, l.d.)						
Water	Level:	Luaterline		300	Thermometer:	Jk.		-52	
рН Ме	eter:	3 1	<u>52</u>		Field Calibrati	on:	h BUFFER	ett700; p	H10,00
Condu	activity Meter:	HORIBA	U-50	<del>)</del>	Field Calibrati	on:	DRIBA HUTE	scal pit	4.00
	/ Filter Size:				Other: TURB	100. / ORP	HORIBA F	UTOCAL	
SAMP		ASUREMEN							
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L ∫),() Ren	m∨ narks ORP
0930		0,2	18,3	6.31	8860	Netrul	39,3	5,43	-75
6935	à	6.2	18,5	6.33	8540	Neutral	430	368	-86
0940	3	0.2	18.9	634	8400	Newfall	40,4	3,21	-93
									····
		t End of Purge:				Sample Intake	Depth (ft. BM	P):	
SAMP	LE INVEN	les Collected			7011				
Time	Volume	Composition (	G. P)	Ño.	Filtration (Y / N)	Preservation (type)	fauglity co	Remarks ontrol sample	a other)
0945	40mL	G		4	N	HCL	VOC	ma or sample	e, other)
000	11/11/11	<u> </u>				1101	<u> VOC</u>	· · · · · · · · · · · · · · · · · · ·	
							<del></del>		
								<u>'' '' '' '' '' '' '' '' '' '' '' '' '' </u>	
Commen	ts:						Tetra Tech	, Inc.	
<del></del>						:	7800 Shoal Cr	eek Blvd.	
	<del>,</del>						Suite 253 Austin, TX		
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	<del></del>		<del></del>						

GRO	UNDWAT	ER SAMP	LINC	REC	CORD		PAGI	E of	
Project N	Vumber:   4-1)	21356 101.1	Project	Name:	FORMOSA	4th QTR 20	) ( (	Date: ///2	9/11
1		-2				Starting Water		): <u>P</u>	
		ell ID, etc.): 👌	-2			Casing Stickup	(ft.):		
Sampled		1 TE				Starting Water	Level (ft. BGL)	i:	
Measuri	ng Point (MP)	of Well:	<u> </u>	1 PV	2	Total Depth (ft.	BGL):		
Screene	d Interval (ft. E	BGL):				Casing Diamet	er (In ID):	2"	
Filter Pa	ck Interval (ft.	BGL):				Casing Volume	(gal.):		
QUAL	ITY ASSU	RANCE							
METHO	DDS (describe)	:							
Cleani	ng Equipment	~	Λ	Ala	CONOX FD	ISTILLED WA	TER RINSE		
Purgin	ng:	ERISTALTIC	Pun	φ	Sampling:		SAME		
Dispos	sal of Discharg	ged Water: (	DHSIT	E DR	UWLS				
INSTRU	MENTS (Indica	ate make, model	, I.d.)						
Water	Level:	1			Thermometer:	_kk	RIBA		
рН Ме	eter:	ORIBA.			Field Calibrati	14 հ	1 BUFFER	·	
Condu	ictivity Meter:	HORIBA			Field Calibrati	1 / -	exiba Hute		
1	/ Filter Size:				Other: Turk	/D.O./ORP	HORIBA F	UTOCA	
SAMP		ASUREMEN			- Carad		· · · · · · · · · · · · · · · · · · ·	<del></del>	1-7
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L /m)	Temp.	pН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L (),() Rem	m∨ arks ()RP
0955	(Bull 5 (2)		23.9	6.55	6950	Nectal	7. 7	3, 33	-120
0955	2	0.2	24.0	6.52	6960	Nectral	5./	2.76	-13a
1000	3	0.2	24.2	7	6 880	Neetral	1.8	250	-141
1000									
Water Lo	evel (ft. BMP) a	it End of Purge:				Sample Intake	Depth (ft. BM	P):	
SAMP	LE INVEN								
	· · · · · · · · · · · · · · · · · · ·	les Collected	(C D)	T	Filtration	Preservation	f -1:4-	Remarks	- 43: - 3
Time	Volume	Composition	(G, P)	No.	(Y / N)	(type)		ontrol sampl	e, otner)
1605	40mL	<u> </u>		1	N	HCL	VOC	- · · · · · · · · · · · · · · · · · · ·	
			<u>-</u>						
									· · · · · · · · · · · · · · · · · · ·
									<del></del>
				<u> </u>		<u> </u>	Tetra Tech	ı Inc	
Commer	nes:	<u> </u>					7800 Shoal Ci		
		<u>,                                    </u>			Tt		Suite 253		
			<u> </u>			(512) 338	Austin, TX 3-1667 F	78757 `ax (512) 338	-1331
				··		(014) 000		,,,	

GRO	UNDWA'	TER SAME	PLIN	G RE	CORD		PAC	E of
Project I	Number:   4-6	021356 101.1	Projec	t Name:	FORMOSA	4th QTR 20		Date: 7 (29(1)
Sample	Number:	5-1				Starting Water		P):
Samplin	g Location (w	ell ID, etc.): 🛭 🖟	15-1			Casing Sticku	p (ft.):	
Sample	i by:	/ TE				Starting Water	Level (ft. BGI	C):
Measuri	ng Point (MP)	of Well:	OC	ZPV	C	Total Depth (ft	. BGL):	
Screene	d Interval (ft. 1	BGL):				Casing Diamet	ter (In ID):	
Filter Pa	ck Interval (ft	. BGL): —				Casing Volume	e (gal.):	
<b>QUAL</b>	ITY ASSU	JRANCE						
METHO	ODS (describe)	):			·			
Cleani	ng Equipmen	ŧ	Δ	Al	CONOX = 1	ISTILLED WA	ITER PINSE	
Purgin	ıg:	ERISTALTIC	Dun	۸ <u>D</u>	Sampling:		SAME	
Dispos	sal of Dischar	ged Water: (	DHSTI	E DR	DM9			
INSTRUI	MENTS (Indica	ate make, model						
Water	Level:	1			Thermometer:	H	RIBA	
рН Ме	ter:	CRIBA			Field Calibrati	ion:	N BUFFER	
Condu	ctivity Meter:	HORIBA			Field Calibrati	lon:	ERIBA AUTI	5cal
Filter	/ Filter Size:				Other: Turk	DO ORP	HORIRA 1	AUTOCAL
SAMP	LING ME	ASUREMEN	NTS					101000
Time	Cum. Vol.	Purge Rate (gal. of L/m)	Temp.	E	Spec. Cond.	6.1	70 1 1 1 1	mg/L mV
1015	(gal. or L)	gai. U. L /III)	32,7 (oc)	pH 6.59	(mmhos/cm)	Color	Turbidity	DO, Remarks ORP
101-	***		2521	2,71	6850	Neefal	۵,0	6.98 ~93
				-				
							<del></del>	
Water Le	vel (ft. BMP) a	t End of Purge:		L		Sample Intake	Denth (ft BM	D)·
	LE INVEN					oumpto ilitaire	Deptii (ic. Divi	. ,.
		les Collected			Filtration	Preservation		Remarks
Time	Volume	Composition (	G, P)	No.	(Y / N)	(type)	(quality co	ontrol sample, other)
1020	40mL	G		4	N	HCL	VOC	
Comment	s:						Tetra Tech	
						7	7800 Shoal Cr	
							Suite 253 Austin, TX	
					<u> </u>	(512) 338		ax (512) 338-1331

Project Number:
Sample Number: Stroper IN Sampling Location (well ID, etc.): Stroper IN Sampling Location (well ID, etc.): Stroper IN Sampled by: Casing Stickup (ft.):  Measuring Point (MP) of Well: Toc. / PVC Total Depth (ft. BGL): Screened Interval (ft. BGL): Casing Diameter (In ID): Filter Pack Interval (ft. BGL): Casing Volume (gal.):  QUALITY ASSURANCE  METHODS (describe): Cleaning Equipment: Alconox = District Water Ringe Purging: Sampling: Sampling: SAME
Sampling Location (well ID, etc.):  Sampled by:  Measuring Point (MP) of Well:  Screened Interval (ft. BGL):  Filter Pack Interval (ft. BGL):  Casing Stickup (ft.):  Starting Water Level (ft. BGL):  Total Depth (ft. BGL):  Casing Diameter (In ID):  Casing Volume (gal.):  QUALITY ASSURANCE  METHODS (describe):  Cleaning Equipment:  Purging:  ACONOX F DISTILLED WATER RINSE  Purging:  Sampling:  SAME
Sampled by:  Measuring Point (MP) of Well:  Screened Interval (ft. BGL):  Filter Pack Interval (ft. BGL):  Casing Diameter (In ID):  Casing Volume (gal.):  QUALITY ASSURANCE  METHODS (describe):  Cleaning Equipment:  Purging:  ACONOX Sampling:  Sampling:  SAME
Measuring Point (MP) of Well:  Screened Interval (ft. BGL):  Filter Pack Interval (ft. BGL):  Casing Diameter (In ID):  Casing Volume (gal.):  QUALITY ASSURANCE  METHODS (describe):  Cleaning Equipment:  Purging:  ACONOX F DISTILED WATER RINSE  Purging:  Sampling:  SAME
Screened Interval (ft. BGL):  Filter Pack Interval (ft. BGL):  Casing Diameter (In ID):  Casing Volume (gal.):  QUALITY ASSURANCE  METHODS (describe):  Cleaning Equipment:  Purging:  ACONOX = DISTILLED WATER RINSE  Purging:  Sampling:  SAME
Casing Volume (gal.):  QUALITY ASSURANCE  METHODS (describe):  Cleaning Equipment:  Purging:  ACONOX = DISTILLED WATER RINSE  Purging:  Sampling:  SAME
QUALITY ASSURANCE  METHODS (describe):  Cleaning Equipment:  Purging:  ACONOX = DISTILLED WATER RINSE  Purging:  Sampling:  SAME
Cleaning Equipment:  Alconox = Distilled Water Ringe  Purging: Sampling: SAME
Purging: TERISTALTIC PUMP Sampling: SAME
Purging: TERISTALTIC PUMP Sampling: SAME
Disposal of Discharged Water: ONSTE DRUMS
INSTRUMENTS (Indicate make, model, l.d.)
Water Level: Thermometer:
pH Meter: HORIBA Field Calibration: DN BUFFER
Conductivity Meter: PIBA Field Calibration: HORIBA HUTECA
Filter / Filter Size: Other: TURB / D.O. / ORP HOLIBA AUTOCA/
SAMPLING MEASUREMENTS
Cum. Vol. Purge Rate Temp. Spec. Cond. mg/L m
Time (gal. or 1) (gal. o 1 /m) (oC) pH (mmhos/cm) Color Turbidity DO Remarks ORF
0850 - 14.9 7.08 3760 Yellow 93.4 7.72 -117
Water Level (ft. BMP) at End of Purge: Sample Intake Depth (ft. BMP):
SAMPLE INVENTORY
Bottles Collected Filtration Preservation Remarks
Time Volume Composition (G, P) No. (Y / N) (type) (quality control sample, other)
855 40mL G 4 N HCL VOC
Comments: Tetra Tech, Inc.
7800 Shoal Creek Blvd.
Suite 253 East Austin, TX 78757
(512) 338-1667 Fax (512) 338-1331

GRO	UNDWA?	TER SAMI	PLIN	G RE	CORD		PAG	Eof
Project I	Number: 114-6	121356 101.1	Project	Name:	FORMOSA	4th QTR 20	) )[[	Date: 7/29/4
Sample	Number:	Stropper	00+			Starting Water		
Samplin	ig Location (w	1.1	Stom	er o	4	Casing Stickup	o (ft.):	
Sample	i by:	/TE				Starting Water	Level (ft. BGL)	):
Measuri	ng Point (MP)	of Well:	OC /	/PV	C	Total Depth (ft		
Screene	d Interval (ft. :	BGL):				Casing Diamet	er (In ID):	
Filter Pa	ick Interval (ft	. BGL): ~				Casing Volume		
QUAL	ITY ASSU	JRANCE	· · · · · · · · · · · · · · · · · · ·		the same of the same			
METHO	ODS (describe	):	***************************************		<del></del>	***************************************		
Cleani	ing Equipmen	<del></del>	4	Al	CONOX & D	ISTILLED WA	TER RINSE	
Purgin		ERISTALTIC	Dun	•	Sampling:		SAME	
	sal of Dischar		DHSTA	F 1				
		ate make, model		Z9L.J.f.S.	011(5			
Water			· · · · · · · · · · · · · · · · · · ·		Thermometer:	kho	PIBA	*
рН Ме	ter:	ORIRA			Field Calibrati	, - 1	1 BUFFER	
	etivity Meter:	HORIBA			Field Calibrati	116 1	EXIBA AUTO	ical
	/ Filter Size:		<u> </u>		Other: Tues	100/000	. 1	lutocal
		ASUREMEN	ITS	·	IVED	10.0.7 01	NOTION F	UIUZAI
	Cum. Vol.	Purge Rate	Temp.		Spec. Cond.			mg/L mV
Time	(gal. or(L)	(gal. of L/m)	(oC)	pН	(mmhos/cm)	Color	Turbidity	DO Remarks ORP
0840			26.7	6,83	1170	Neutral	47,4	3.8 107
				_				
	· · · · · · · · · · · · · · · · · · ·			-	****			
		t End of Purge:				Sample Intake	Depth (ft. BMI	?):
SAMP	LE INVEN							
Time	Volume	les Collected Composition (	G Pl	No.	Filtration	Preservation		Remarks
		Composition (	G, 1)	Ц.	(Y / N)	(type)		ntrol sample, other)
0845	40mL			7	N	HCL HCL	VOC	
	<del>-</del>							
<del>  </del>								
Sommoni	to	·					Totas Task	Y
Comment	10.					7	Tetra Tech, 800 Shoal Cro	
						·	Suite 253	East
		<del>, , , , , , , , , , , , , , , , , , , </del>	<del></del> .		[ - • ]	(E10) 000	Austin, TX	
						(512) 338-	-100/ Fa	ex (512) 338-1331

GRO	UNDWAT	TER SAMI	LIN	3 RE	CORD		PAG	E of	
Project N	Number: 114-6	121356 101.1	Project	: Name:	FORMOSA	44h QTR 20	>//	Date: 7/29/1/	
t .		.~13		Starting Water Level (ft. BMP):					
Samplin	g Location (we	ell ID, etc.):	-13	Casing Stickup (ft.):					
Sampled	l by:	/TE		Starting Water Level (ft. BGL):					
Measuri	ng Point (MP)	of Well:	OC 1		Total Depth (ft. BGL):				
Screene	d Interval (ft. 1	3GL):			Casing Diameter (In ID):				
Filter Pack Interval (ft. BGL):						Casing Volume (gal.):			
QUAL	ITY ASSU	RANCE							
METHO	DDS (describe)	:							
Cleani	ng Equipmen	ξ.	^	Al	CONOX FD	ISTILLED WA			
Purgin	g:t	ERISTALTIC	Pow	φ	Sampling:		SAME		
Dispos	sal of Discharg	ged Water: (	DUST	E DR	UMS				
INSTRUI	MENTS (Indica	ate make, model	, I.d.)						
Water Level: Thermometer:									
pH Meter: HORIBA Field Calibration: DN BUFFER									
Condu	ctivity Meter:	HORIBA		· · · · · · · · · · · · · · · · · · ·	Field Calibrati	on:	DRIBA HUTI		
	Filter Size:		<del></del>		Other: Turk	/DO:/ORP	HORIBA !	UTOCA	
SAMP		ASUREMEN		<del>,</del>	<del></del>	<del></del>			
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	рН	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L m√ DO Remarks ORP	
1155	1	0.0	27,3	7.61	5040	Nextral	174	5,40 -266	
1200	2	02	27,2	769	5060	Neutral	155	3.92 -287	
1205	3	0.2	27.0	7.72	5080	Natol	14)	3,33 -363	
			v						
							<del></del>		
		t End of Purge:			Sample Intake Depth (ft. BMP):				
SAMP	LE INVEN								
Time	Volume	tles Collected Composition (G, P)		No. (Y / N)		Preservation (type)	Remarks (quality control sample, other)		
1210	40mL	A		14	N	HCL	VDC		
1000						1101	VUC.		
					· · · · · · · · · · · · · · · · · · ·				
	ĺ								
							· · · · · · · · · · · · · · · · · · ·		
Comment	s:						Tetra Tech	ı, Inc.	
						7	7800 Shoal Cr	eek Blvd.	
					Tt		Suite 253 Austin, TX		
· · ·			<del></del>			(512) 338-		78757 ax (512) 338-1331	
		<del></del>				<del></del>			

GROU	JNDWAT	ER SAMP	LING	REC	ORD		PAGE	C of		
		213.5% 101.1				4th QTR 20		Date: 7/29/11		
Sample N		-14				Starting Water Level (ft. BMP):				
		II ID, etc.): 0	14			Casing Stickup (ft.):				
Sampled		1 TE				Starting Water	Level (ft. BGL)	:		
	ng Point (MP) o	of Well:	- 50 /	PV	0	Total Depth (ft	BGL):			
<u></u>	Interval (ft. B				-	Casing Diameter (In ID):				
	ck Interval (ft.					Casing Volume (gal.):				
QUAL	ITY ASSU	RANCE								
метно	DS (describe)									
Cleanir	ng Equipment		Λ—		CHOX FD	ISTILLED WA				
Purginį	g: <u> </u>	ÉRISTALTIC	Hum	<del>p</del> _	Sampling:		SAME			
Dispos	al of Discharg	ed Water: (	)HSTI	DR	DMS					
INSTRUM	MENTS (Indica	ite make, model	, I.d.)							
Water l	Level:				Thermometer:	, kt	PIRA			
pH Met	ter:	ORIBA				Field Calibration: ON BUFFER				
Condu	ctivity Meter:	HORIBA			Field Calibrati	on:	DRIBA HUTE			
	Filter Size:	·—			Other: JURB	100/ORF	HORIBA !	UTOCAL		
SAMP		ASUREMEN			Spec Cond	<u>r                                      </u>		ImalL mV		
Time	Cum. Vol. (gal. or L)	Purge Rate (gal. of L/m)	Temp. (oC)	рĦ	Spec. Cond. (mmhos/cm)	Color	Turbidity	mg/L mV DO Remarks ORP		
<b></b>	Igan. O(13)	0-2	26.53		5880	Neutra	50.8	3,29 46		
1/25	2	0-2	26.8	730	6110	Neutral	4	2,54 -126		
1135	3	0.2	26.7	7,01	6200	Neetal	4310	2.40 -128		
1122			V 07 (	78.6						
				1						
Water Le	evel (ft. BMP) a	t End of Purge:				Sample Intake Depth (ft. BMP):				
	LE INVEN									
	Bott	les Collected		Filtratio		Preservation	Remarks			
Time	Volume	Composition (G, P)		No.	(Y / N)	(type)		ontrol sample, other)		
1140	40mL	6		4	<u> </u>	HCL	VOC			
								<u>.,</u>		
				<del> </del>						
<b></b>				<del>                                     </del>						
						1	Tetra Tecl	h Inc		
Commen	its:						7800 Shoal C			
							Suite 253			
					Į <b>-∪</b> j	(512) 33	Austin, TX	78757 Fax (512) 338-1331		
						(312) 33	10-1001 I	( as (012) 000-1001		